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SEA VOYAGES OF EXPLORATION

SEA VOYAGES OF EXPLORATION

Selected and Edited by
G. A. SAMBROOK, M.A.



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INTRODUCTION

THE desire to travel has been a driving force with all races of men and, for the curious, the longing to see beyond the horizon has proved irresistible. Ever since the time when fishermen groped their way along the coasts of the Mediterranean, men have been impelled by various motives to explore new capes and islands and to strike into unknown seas. They came back with travellers' tales—the oldest tales of all—and these tales fired the imagination of other adventurous spirits and inspired them to tackle formidable obstacles with the risk of untold dangers. How else can we account for the Viking explorers who struggled in their rowing-boats across storm-swept seas or Elizabethan seamen in cockle-shells of sailing-ships who ventured into unknown oceans, “where sawdust and mice were rare relish”? Of course there were other incentives besides mere curiosity. Travellers related tales of fabulous wealth and many adventurers before and after Sir Walter Raleigh risked their lives and reputations on finding El Dorado. Pilgrims travelled in the name of religion. The Viking explorer Eric the Red went to colonise Greenland and established Christianity there. In the Middle Ages Christian missionaries made pilgrimages to the Holy Land, to Russia, and the Far East; the great Portuguese explorers hoped to make Christianity the religion of the world.

Many of these early travellers were ambassadors from one court to another. Marco Polo carried

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news of the western world to Kublai Khan and was content to suffer fearsome perils that he might bring back to Venice riches and incredible tales of strange marvels. Fifty years later Ibn' Battuta travelled from the court of the Sultan to India, Pekin, and Mozambique. It is probable that exploration began with man's search for food, but the pursuit of trade was the biggest incentive of all and took many travellers to the far corners of the world.

Of those who travelled in early days and left no record we cannot speak. The earliest recordings that we have access to come from those Mediterranean races where western civilisation first arose. Our first maps radiate from the Mediterranean. For hundreds of years expansion was from the borders of the Mediterranean to Africa in the south and to India and China in the east. The Phoenicians were great traders and their ships travelled all over the known world. Their trading vessels were, however, small and usually propelled by oars which meant they had to hug the shore. Yet contrary winds and tempests often meant that ships were blown off their course and the crews found themselves in strange waters. Curiosity, the thirst for knowledge, and the possibility of finding new and richer lands were all inducements to explore and return again. In such a way the Vikings discovered America. The inadequacy of navigating instruments was yet another cause of arrival at strange lands; and it is a matter of surmise how much was discovered of which we have no record. The Phoenicians almost certainly traded with the Far East.

Our first recorded history in the story of exploration begins with the Greeks. Herodotus (c. 484-424 B.C.), a great historian and geographer, had an inquiring mind and travelled far himself. In the next century Greek writers describe how Alexander

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the Great explored a great part of Asia and instructed his navigator to find a way across the Indian Ocean from the Indus to the Euphrates. The Roman conquerors and explorers were ambitious to emulate the greatness of Alexander. They carried on the story and expanded their empire in every direction from the lands surrounding the Mediterranean. When Ptolemy produced his map of the world in the second century A.D., it not only contained nearly all the information known up to that date but marks, by his use of latitude and longitude for fixing positions, the first scientific approach to geography. Julius Caesar was the greatest of Rome's explorer-soldiers and Plutarch says he "was the first who brought a navy into the western ocean, or who sailed into the Atlantic with an army to make war; and by invading an island, the existence of which was a matter of controversy among historians, he might be said to have carried the Roman Empire beyond the limits of the known world."

Too little attention has been paid to the vast empire created by the Arabs from the time of Mohammed until it reached its zenith about A.D. 750. Moslem ambassadors visited China while Arab armies penetrated deep into Asia and laid siege to Toulouse in the west. The Arab seamen were expert navigators and, during the ninth century, Arab merchants sailed from the Persian Gulf to China and India and down the African coast as far as Madagascar.

The history of exploration in the Middle Ages is bound up with the search for those spices which were considered indispensable to wealthy Europeans—"pepper, nutmegs, spikenard, galingale, cubebs, cloves." But what came to be known as the Age of Discovery was made easier by certain technical developments. Improvements in ship design resulted

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in the construction of more seaworthy vessels, while the development of the card compass, the quadrant (for the reckoning of latitude), and more reliable navigators' charts, provided men with greater opportunity to exploit their audacity and inquisitiveness. The Portuguese were fortunate in Prince Henry the Navigator. In the early fifteenth century he surrounded himself with cartographers and mathematicians and soon assembled an excellent geographical and nautical library. New instruments were developed, sailors trained, and shipyards constructed so that Portugal was the first to find a sea-route from Europe to the riches of the East. When the Portuguese had ousted the Arabs from the Spice Islands and built up a lucrative trade, they took pains to exclude by force and treaty rights the English, Dutch, and French. Then began the search for an Arctic route to China and the Moluccas which, though fruitless and painful, nevertheless fills an heroic page in the story of exploration in northern latitudes. London merchants decided to form the East India Company to make another bid for "the trade in the East Indies and to bring into England spices and other commodities." The fleet which sailed under the command of James Lancaster in 1600 and returned successfully with a rich cargo marks the beginning of a long struggle with the Portuguese and Dutch for supremacy in the East.

Before the seventeenth century had closed nearly all the world's surface had been discovered. The search for a way around North America to the Pacific, which began with Martin Frobisher in 1576 and lasted for half a century, was not successful until our own days. But if we examine an early seventeenth-century map its outline is seen to be very little different from that of a modern atlas. The shape of only a few South Sea islands and the frozen

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wastes around the north and south Poles were left to be etched in, although vast inland areas of Africa, Asia, and South America were unexplored until the nineteenth century.

In the twentieth century it has been the fascinating story of polar exploration—a story displaying all the splendid qualities shared by earlier adventurers and reaching its climax in the poignant narrative of Scott's second expedition. Captain Scott's last message may well serve as a fitting epitaph not only for his own epic tale of endurance but for the heroic achievements of all time: "Had we lived, I should have had a tale to tell of the hardihood, endurance, and courage of my companions which would have stirred the heart of every Englishman."

G. A. S.

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ODYSSEUS BUILDS HIMSELF A SHIP

[It has been claimed that the Egyptians built the first ships and used them along the river Nile and in the Mediterranean. They certainly had sailing boats on the river Nile as early as four thousand years before Christ for there are pictures of such boats on the graves of Egyptians who died then.

The Greeks much later also used ships for trade and fighting, and from them we have some of the first accounts of exciting adventures at sea. Homer, the earliest Greek writer we know of, probably lived a thousand years before Christ and is, perhaps, the world's best story-teller. In the *Odyssey* he tells about the adventures of a famous Greek hero, Odysseus, on his way home from a ten years' war against the Trojans. After many years Odysseus has failed to make his way home to his own kingdom, mainly because the sea-god Poseidon was his enemy. In the passage which follows we learn that the nymph Calypso decides to help him on his way. She teaches him how to build a ship in which he sails away only to be wrecked once more by the anger of Poseidon.]

The new Dawn had scarcely touched the East with red before Odysseus put his cloak and tunic on. The Nymph [Calypso] dressed herself too in a long silvery mantle of a light material charming to the eye, with a splendid golden belt round her waist, and a veil over her head. Then she turned her

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thoughts to the problem of her noble guest's departure. First she gave him a great axe of bronze. Its double blade was sharpened well, and the shapely handle of olive-wood fixed firmly in its head was fitted to his grip. Next she handed him an adze of polished metal; and then led the way for him to the farthest part of the island, where the trees grew tall, alders and poplars and firs that shot up to the sky, all withered timber that had long since lost its sap and would make buoyant material for his boat. When she had shown him the place where the trees were tallest the gracious goddess left for home, and Odysseus began to cut the timber down. He made short work of the task. Twenty trees in all he felled, and lopped their branches with his axe; then trimmed them in a workmanlike manner and trued them to the line. Presently Calypso brought him augers. With these he drilled through all his planks, cut them to fit across each other, and fixed this flooring together by means of dowels driven through the interlocking joints, giving the same width to his boat as a skilled shipwright would choose in designing the hull for a broad-bottomed trading vessel. He next put up the decking, which he fitted to ribs at short intervals, finishing off with long gunwales down the sides. He made a mast to go in the boat, with a yard-arm fitted to it, and a steering-oar, too, to keep her on her course. And from stem to stern he fenced her sides with plaited osier twigs and a plentiful backing of brushwood, as some protection against the heavy seas. Meanwhile the goddess Calypso had brought him cloth with which to make the sail. This he manufactured too; and then lashed the braces, halyards, and sheets in their places on board. Finally he dragged her down on rollers into the tranquil sea.

By the end of the fourth day all his work was done,

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and on the fifth beautiful Calypso saw him off from the island. The goddess had bathed him first and fitted him out with fragrant clothing. She had also stowed two skins in his boat, one full of dark wine, the other and larger one of water, besides a leather sack of corn and quantities of appetizing meats. And now a warm and gentle breeze sprang up at her command.

It was with a happy heart that the good Odysseus spread his sail to catch the wind and used his seamanship to keep his boat straight with the steering-oar. There he sat and never closed his eyes in sleep, but kept them on the Pleiads, or watched Bootes slowly set, or the Great Bear, nicknamed the Wain, which always wheels round in the same place and looks across at Orion the Hunter with a wary eye. It was this constellation, the only one which never bathes in Ocean's Stream, that the wise goddess Calypso had told him to keep on his left hand as he made across the sea. So for seventeen days he sailed on his course, and on the eighteenth there hove into sight the shadowy mountains of the Phaeacians' country, which jutted out to meet him there. The land looked like a shield laid on the misty sea.

But now Poseidon, Lord of the Earthquake, who was on his way back from his visit to the Ethiopians, observed him from the distant mountains of the Solymi. The sight of Odysseus sailing over the seas added fresh fuel to his anger. He shook his head and muttered to himself: "So I had only to go to Ethiopia for the gods to change their minds about Odysseus! And there he is, close to the Phaeacians' land, where he is destined to bring his long ordeal to an end. Nevertheless I mean to let him have his bellyful of trouble yet."

Whereupon he marshalled the clouds and seizing his trident in his hands stirred up the sea. He roused

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the stormy blasts of every wind that blows, and covered land and water alike with a canopy of cloud. Darkness swooped down from the sky. East Wind and South and the tempestuous West fell to on one another, and from the North came a white squall, rolling a great wave in its van. Odysseus' knees shook and his spirit quailed. In anguish he communed with that great heart of his :

"Poor wretch, what will your end be now? I fear the goddess prophesied all too well when she told me I should have my full measure of agony on the sea before I reached my native land. Every word she said is coming true, as I can tell by the sky, with its vast coronet of clouds from Zeus, and by the sea that he has raised with angry squalls from every quarter. There is nothing for me now but sudden death. They are the lucky ones, those countrymen of mine who fell long ago on the broad plains of Troy in loyal service to the sons of Atreus. If only I too could have met my fate and died that day the Trojan hordes let fly at me with their bronze spears over Achilles' corpse! I should at least have had my burial rites and the Achaeans would have spread my fame abroad. But now it seems I was predestined to a villainous death."

As he spoke, a mountainous wave, advancing with majestic sweep, crashed down upon him from above and whirled his vessel round. The steering-oar was torn from his hands, and he himself was tossed off the boat, while at the same moment the warring winds joined forces in one tremendous gust, which snapped the mast in two and flung the sail and yard-arm far out into the sea. For a long time Odysseus was kept under water. Weighed down by the clothes which the goddess Calypso had given him, he found it no easy matter to fight his way up against the downrush of that mighty wave. But at last he reached

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the air and spat out the bitter brine that kept streaming down his face. Exhausted though he was, he did not forget his boat, but raced after her through the surf, scrambled up, and squatting amidships felt safe from immediate death. The heavy seas thrust him with the current this way and that. As the North Wind at harvest-time tosses about the fields a ball of thistles that have stuck together, so did the gusts drive his craft hither and thither over the sea. Now the South Wind would toss it to the North to play with, and now the East would leave it for the West to chase. •

But there was a witness of Odysseus' plight. This was the daughter of Cadmus, Ino of the slim ankles, who was once a woman speaking like ourselves, but now lives in the salt depths of the sea. She took pity on the forlorn and woebegone Odysseus, rose from the water like a sea-mew on the wing, and settled on his boat.

"Poor man," she said to him, "why is Poseidon so enraged with you that he sows nothing but disasters in your path? At any rate he shall not kill you, however hard he tries. Now do exactly what I say, like the sensible man you seem to be. Take off those clothes, leave your boat for the winds to play with, and swim for your life to the Phaeacian coast, where deliverance awaits you. Here; take this veil and wind it round your waist. With its divine protection you need not be afraid of injury or death. But directly you touch the dry land with your hands, undo the veil and throw it far out from shore into the wine-dark sea; and as you do so turn your eyes away."

As she spoke the goddess gave him the veil, and then like a sea-mew she dived back into the turbulent sea and the dark waters swallowed her up. Stalwart Odysseus was left in perplexity and distress, and once more took counsel with his indomitable soul, asking

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himself with a groan whether this advice to abandon his boat was not some new snare that one of the immortals had set to catch him.

"No," he decided; "I will not leave the boat at once, for I saw with my own eyes how far the land is where she promised me salvation. Instead, I shall do what I myself think best. As long as the joints of my planks hold fast, I shall stay where I am and put up with the discomfort. But when the seas break up my boat, I'll swim for it, since as far as I can see, there will be no better plan."

As Odysseus was turning this over in his mind, Poseidon the Earthshaker sent him another monster wave. Grim and menacing it curled above his head, then hurtled down and scattered the long timbers of his boat, as a boisterous wind will tumble a parched heap of chaff and scatter it in all directions. Odysseus scrambled onto one of the beams, and bestriding it like a rider on horseback cast off the clothes that Calypso had given him. Then he wound the veil round his middle, and with arms outstretched plunged headlong into the sea and boldly struck out.

But the Lord Poseidon spied him again and once more shook his head and muttered low: "So much for you! Now make your miserable way across the sea, until you come into the hands of a people whom the gods respect. Even though you reach them, I do not think you'll be in any mood to scoff at the buffeting you will have had." With this, Poseidon lashed his long-maned horses and drove to Aegse, where he has his palace.

At this point Athene, Daughter of Zeus, decided to intervene. She checked all the other Winds in their courses, bidding them calm down and go to sleep; but from the North she summoned a strong breeze, with which she beat the waves down in the swimmer's path, so that King Odysseus might be

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rescued from the jaws of death and come into the hands of the sea-faring Phaeacians.

For two nights and two days he was lost in the heavy seas. Time and again he saw his end at hand. But in the morning of the third day, which Dawn opened in all her beauty, the wind dropped, a breathless calm set in, and Odysseus, keeping a sharp lookout ahead as he was lifted by a mighty wave, could see the land close by. He felt all the relief that a man's children feel when their father, wasted by long agonies abed in the malignant grip of some disease, passes the crisis by god's grace and they know that he will live. Such was Odysseus' happiness when he caught that unexpected glimpse of wooded land. He swam quickly on in his eagerness to set foot on solid ground. But when he had come within call of the shore, he heard the thunder of surf on a rocky coast. With an angry roar the great seas were battering at the ironbound land and all was veiled in spray. There were no coves, no harbours that would hold a ship; nothing but headlands jutting out, sheer rock, and jagged reefs. When he realised this, Odysseus' knees quaked and his courage ebbed. He groaned in misery as he summed up the situation to himself:

"When I had given up hope, Zeus let me see the land, and I have taken all the trouble to swim to it across those leagues of water, only to find no way whatever of getting out of this grey surf and making my escape. Off shore, the pointed reefs set in a raging sea; behind, a smooth cliff rising sheer; deep water near in; and never a spot where a man could stand on both his feet and get to safety. If I try to land, I may be lifted by a roller and dashed against the solid rock—in which case I'd have had my trouble for nothing. While, if I swim farther down the coast on the chance of finding a natural

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harbour where the beaches take the waves aslant, it is only too likely that another squall will pounce on me and drive me out to join the deep-sea fish, where all my groans would do no good. Or some monster might be inspired to attack me from the depths. . . .”

This inward debate was cut short by a tremendous wave which swept him forward to the rugged shore, where he would have been flayed and all his bones been broken, had not the bright-eyed goddess Athene put it into his head to dash in and lay hold of a rock with both his hands. He clung there groaning while the great wave marched by. But no sooner had he escaped its fury than it struck him once more with the full force of its backward rush and flung him far out to sea. Pieces of skin stripped from his sturdy hands were left sticking to the crag, thick as the pebbles that stick to the suckers of a squid when he is torn from his hole. The great surge passed over Odysseus' head and there the unhappy man would have come to an end, if Athene had not inspired him with a wise idea. Getting clear of the coastal breakers as he struggled to the surface, he now swam along outside them, keeping an eye on the land, in the hope of lighting on some natural harbour with shelving beaches. Presently his progress brought him off the mouth of a fast-running stream, and it struck him that this was the best spot he could find, for it was not only clear of rocks but sheltered from the winds. The current told him that he was at a river's mouth, and in his heart he prayed to the god of the stream :

“Hear me, although I do not know your royal name ; for in you I find the answer to all the prayers I have made for deliverance from the sea and from Poseidon's malice. Even the immortal gods do not rebuff a poor wanderer who comes to them for help, as I now turn to you after much suffering and seek

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the sanctuary of your stream. Take pity on me, royal River. I claim a suppliant's rights."

In answer to his prayer the River checked its current, and holding back its waves made smooth the water in the swimmer's path, and so brought him safely to land at its mouth. Odysseus bent his knees and sturdy arms, exhausted by his struggle with the sea. All his flesh was swollen and streams of brine gushed from his mouth and nostrils. Winded and speechless he lay there too weak to stir, overwhelmed by his terrible fatigue. Yet directly he got back his breath and came to life again, he unwound the goddess' veil from his waist and let it drop into the river as it rushed out to sea. The strong current swept it downstream and before long it was in Ino's own hands. Odysseus turned his back on the river, threw himself down in the reeds and kissed the bountiful earth.

HOMER'S *Odyssey*, Book V (trans. E. V. Rieu)

THE PHOENICIAN SAILORS

[THE Phoenicians played a large part in the early civilisation of the world. They tended to be a commercial rather than an agricultural people and lived along the 200-mile coast of the eastern Mediterranean with their chief towns Tyre, Sidon, Gebal, and Arvad. They were a people of remarkable enterprise and, like the Venetians at a later date, carried the merchandise of every country. They were skilled shipbuilders and their seamen were experienced navigators who founded trading colonies all over the Mediterranean—as far as Great Britain in the West, the "Tin Islands," and India in the East. Their greatest colony was Carthage, founded

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about 840 B.C., from which they despatched expeditions down the west coast of Africa. The ruling city of Tyre reached its zenith from 1200 to 700 B.C. and its manufactured linens, purple-dyed woollens, glassware, and metal implements were carried to the far corners of the ancient world.

Ezekiel, a Hebrew prophet who was carried captive to Babylon in 597 B.C., gives an imposing list of the glories of Phoenician trade and in chapters 26 and 27 of the Book of Ezekiel foretells the decay of Tyre as a political power with the destruction of all its material wealth. There is a recital of the cities and nations with which the Phoenician caravans and ships traded and an account of the merchandise they carried back to Tyre. The catalogue is as remarkable for the poetry of its proper names as for the variety and richness of the commerce. Ezekiel begins with the ships which will carry these goods. The timber for ship boards comes from Senir (Northern Lebanon), the cedars of Lebanon supply the masts, and the oak trees of Bashan—a territory to the east of the Sea of Tiberius—provide the oars. “Fine linen with brodered work from Egypt” is used for sails, and the dye for clothing comes from the purple shellfish of the Aegean and Sicily—“the isles of Elishah.” Warriors of Lud and Phut were the men of Libya. Tarshish with its multitude of riches, its “silver, iron, tin, and lead” is by some authorities placed far to the west of the Mediterranean and perhaps included the British Isles; others think the reference may be to India. From Greece and Asia Minor came slaves and fine brass work; from Armenia, horses and sheep; and goats from Arabia.]

3. And say unto Tyrus, O thou that are situate at the entry of the sea, *which art* a merchant of the people

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for many isles, Thus saith the Lord God ; O Tyrus, thou hast said, I *am* of perfect beauty.

4. Thy borders *are* in the midst of the seas, thy builders have perfected thy beauty.

5. They have made all thy *ship* boards of fir-trees of Senir : they have taken cedars from Lebanon to make masts for thee.

6. *Of* the oaks of Bashan have they made thine oars ; the company of the Ashurites have made thy benches of ivory, brought out of the isles of Chittim.

7. Fine linen with brodered work from Egypt was that which thou spreadest forth to be thy sail ; blue and purple from the isles of Elishah was that which covered thee.

8. The inhabitants of Zidon and Arvad were thy mariners : thy wise men, O Tyrus, that were in thee, were thy pilots.

9. The ancients of Gebal and the wise men thereof were in thee thy calkers : all the ships of the sea with their mariners were in thee to occupy thy merchandise.

10. They of Persia and of Lud and of Phut were in thine army, thy men of war : they hanged the shield and helmet in thee ; they set forth thy comeliness.

11. The men of Arvad with thine army were upon thy walls round about, and the Gammadims were in thy towers : they hanged their shields upon thy walls round about ; they have made thy beauty perfect.

12. Tarshish was thy merchant by reason of the multitude of all kind of riches ; with silver, iron, tin, and lead, they traded in thy fairs.

13. Javan, Tubal, and Meshech, they were thy merchants : they traded the persons of men and vessels of brass in thy market.

14. They of the house of Togarmah traded in thy fairs with horses and horsemen and mules.

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15. The men of Dedan *were* thy merchants; many isles *were* the merchandise of thine hand: they brought thee *for* a present horns of ivory and ebony.

16. Syria *was* thy merchant by reason of the multitude of the wares of thy making: they occupied in thy fairs with emeralds, purple, and brodered work, and fine linen, and coral, and agate.

17. Judah, and the land of Israel, they *were* thy merchants: they traded in thy market wheat of Minnith, and Pannag, and honey, and oil, and balm.

18. Damascus *was* thy merchant in the multitude of the wares of thy making, for the multitude of all riches; in the wine of Helbon, and white wool.

19. Dan also and Javan going to and fro occupied in thy fairs: bright iron, cassia, and calamus, were in thy market.

20. Dedan *was* thy merchant in precious clothes for chariots.

21. Arabia, and all the princes of Kedar, they occupied with thee in lambs, and rams, and goats: in these *were they* thy merchants.

22. The merchants of Sheba and Raamah, they *were* thy merchants: they occupied in thy fairs with chief of all spices, and with all precious stones, and gold.

23. Haran, and Canneh, and Eden, the merchants of Sheba, Asshur, and Chilmad, *were* thy merchants.

24. These *were* thy merchants in all sorts of things, in blue clothes, and brodered work, and in chests of rich apparel, bound with cords, and made of cedar, among thy merchandise.

25. The ships of Tarshish did sing of thee in thy market: and thou wast replenished, and made very glorious in the midst of the seas.

Ezekiel, Chapter 27

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SAILING ROUND AFRICA, 600 B.C.

[THE Greek historian Herodotus (c. 484-424 B.C.) is often called the "Father of History." He was an explorer and travelled widely, visiting Macedonia, Persia, and Egypt where he spent a long time. His famous history describes the rise and growth of the two kingdoms of Persia and Greece and gives us valuable information about the known world of his day. He writes of the three continents, Europe, Asia, and Africa, although he was uncertain of their limits. Europe was bounded by the Atlantic on the west but he had little knowledge of the central or northern parts. In Asia he knew of India and the Indus valley and we shall learn how he relates the story of a Phœnician expedition which sailed round Africa from east to west, returning safely to Egypt through the Pillars of Hercules—the straits of Gibraltar—after a voyage of three years.

Much of his information is gathered from his own travels for he had a keen eye for the manners and customs of the people and lands he visited. He mapped out the north coast of Africa and fills out his information of many places with delightful stories from the reports of other travellers.]

For my part I am astonished that men should ever have divided Libya [Africa], Asia, and Europe as they have, for they are exceedingly unequal. Europe extends the entire length of the other two and for breadth will not even (as I think) bear to be compared to them. As for Libya, we know it to be washed on all sides by the sea, except where it is attached to Asia. This discovery was first made by Necôs, the Egyptian king, who on desisting from the canal which he had begun between the Nile and the

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Arabian Gulf, sent to sea a number of ships manned by Phœnicians, with orders to make for the Pillars of Hercules, and return to Egypt through them, and by the Mediterranean. The Phœnicians took their departure from Egypt by way of the Erythraean Sea, and so sailed into the southern ocean. When autumn came, they went ashore, wherever they might happen to be, and having sown a tract of land with corn, waited until the grain was fit to cut. Having reaped it, they again set sail; and thus it came to pass that two whole years went by, and it was not till the third year that they doubled the Pillars of Hercules and made good their voyage home. On their return, they declared—I for my part do not believe them, but perhaps others may—that in sailing round Libya they had the sun upon their right hand. In this way was the extent of Libya first discovered.

Next to these Phœnicians the Carthaginians, according to their own accounts, made the voyage. For Sataspes did not circumnavigate Libya though he was sent to do so; but fearing the length and desolateness of the journey, he turned back and left unaccomplished the task which had been set him by his mother. This man had used violence towards a maiden, the daughter of Zæpyrus, and King Xerxes was about to impale him for the offence, when his mother, who was a sister of Darius, begged him off, undertaking to punish his crime more heavily than the king himself had designed. She would force him, she said, to sail round Libya and return to Egypt by the Arabian Gulf. Xerxes gave his consent; and Sataspes went down to Egypt and there got a ship and crew with which he set sail for the Pillars of Hercules. Having passed the Straits, he doubled the Libyan headland, known as Cape Soloeis, and proceeded southward. Following this course for

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many months over a vast stretch of sea, and finding that more water than he had crossed still lay ever before him, he put about and came back to Egypt. Thence proceeding to the court he made report to Xerxes, that at the farthest point to which he had reached, the coast was occupied by a dwarfish race, who wore a dress made from the palm-tree. These people, whenever he landed, left their towns and fled away to the mountains; his men, however, did them no wrong, only entering their cities and taking some of their cattle. The reason why he had not sailed quite round Libya was, he said, because the ship stopped and would not go any further. Xerxes, however, did not accept this account for true; and so Sataspes, as he had failed to accomplish the task set him, was impaled by the king's orders in accordance with the former sentence.

HERODOTUS (trans. Canon Rawlinson)

ALEXANDER THE GREAT IN THE INDIAN OCEAN, 334 B.C.

[ALEXANDER the Great (356-323 B.C.), in a series of wonderful military exploits, made himself master of all the cities along the Mediterranean, conquered Egypt, and founded Alexandria. He defeated a mighty Persian army led by Darius at the battle of Issus—one of the decisive battles of the world for it left the western lands of the Persian Empire at the mercy of the Greek commander. The rich trading city of Tyre was besieged and laid waste. Egypt was overrun, 332-331 B.C., and Alexander was free to advance to the east. Babylon and Susa, the capital of Darius, were captured, with treasure of inestimable value, and the murder of Darius by his

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own subjects marks the end of the Persian dynasty which had lasted for two centuries. Two years were spent in subduing the eastern provinces of Persia and, in 327 B.C., Alexander planned his invasion of India.

Travellers' tales of its rich magnificence had for a long time fired his imagination. With an army of 120,000 men Alexander advanced to the north of the Khyber Pass. He crossed the river Indus in boats and defeated Porus, a mighty monarch, in a brilliantly planned and executed battle which gave him command of the Punjab. His men were opposed to any further advance so, for his return journey, Alexander constructed ships sufficient to carry 8000 men. With this armada he began, in 326 B.C., the most important of all early voyages. His commander Nearchus, probably "the first of all scientific naval explorers," was in charge of the fleet on its 900-mile journey to the sea, while divisions of the army marched along both banks. When Nearchus sailed into the open sea, Alexander with his huge land force failed to keep in touch with his ships along the coast but was reunited with his fleet after many months and eventually completed his voyage to Babylon.

Alexander has been described as the greatest of all soldiers, with a passionate love of exploration and a remarkable thirst for knowledge. Arrian, his historian, writes: "For my own part, I think there was at that time no race of men, no city, nor even a single individual to whom Alexander's name and fame had not penetrated." He was "A hero totally unlike any other human being."

Alexander wished to open fresh trade routes with India by sea as well as by land; but for his untimely death, his exploratory voyage along the coast of the Persian Gulf might have borne excellent results.

He certainly supplied the Greeks with valuable

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information about India and exposed the falsity of many strange stories which travellers had circulated. But it was the return voyage of exploration which he planned and entrusted to Nearchus that gave Alexander most pleasure. "I swear to you," he informed Nearchus, "that I have greater pleasure in the success of this enterprise, than in the reduction of all Asia to my party."

Nearchus made a brilliant success of the voyage in spite of cruel hardships and continual hostility from the "Ichthyophagi"—the fish-eating natives whom he describes.]

Nearchus informs us that Alexander had a most earnest desire of exploring the passage by sea from India to the Persian Gulf; but that he was under great anxiety lest the attempt should expose those who embarked in the expedition to great hazards from the length of the voyage, the desert coasts that might occur, the want of harbours, or the different nature of the winds in the Indian Ocean. If any reverse should happen in such an attempt, he thought it would be a blot upon all the great actions he had achieved, and annihilate the character of good fortune which had hitherto attended him in everything he had attempted. Still the desire of achieving something new and extraordinary prevailed; but he had much doubt about the proper person to be selected for the accomplishment of his designs.

The first point was to secure the confidence of those who were to embark by the nomination of an experienced commander; for if this were not done, they might apprehend that their lives were to be idly thrown away upon a service where the danger was evident [and the attempt fruitless].

In this difficulty, says Nearchus, I offered my own services to the king, and told him, that "I would

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undertake the command; and that, if it pleased God, I would conduct both the men and fleet in safety to the Persian Gulf, provided I should find the sea navigable, and the undertaking practicable by the power of man."

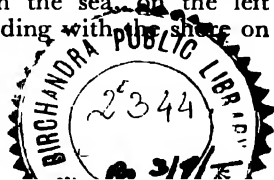
Alexander professed that he was unwilling to expose anyone of his friends to a service of such danger and distress; but, when Nearchus still persevered in his offer, and urged the acceptance of his proposal, Alexander was delighted with his alacrity, and instantly appointed him to the command.

The appointment had the full effect it was intended to produce, for the [officers,] seamen, and soldiers who were destined for the expedition, now set their minds at ease; conscious as they were, that Alexander would not have named a man so dear to him as Nearchus, unless there were a reasonable prospect of success in the undertaking.

Under this impression, the fleet was equipped not only with what was necessary, but with splendour and decoration. The attention of the Trierarchs was directed to procure the best men and the fullest complements; and the backwardness of those, who had been most unwilling to embark, was now converted into confidence, and pleasing hopes of a favorable issue of the voyage. . . .

In the Indian Ocean there is a regular wind which sets upon the coast during the whole summer season; and while that prevails, there is no navigation [to the westward]. It was in this season that Alexander had reached the delta of the Indus; but, upon the change of this wind, the voyage commenced. . . .

Upon leaving Krôkelâ, they followed the coast with a mountain called Eirus on their right, and a low island, almost level with the sea, on the left hand. This island, corresponding with the shore on



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the main, forms a narrow channel ; through this they passed and anchored in a good harbour, which is sheltered by an island called Bibactè.

While lying here, the wind came on so violently from the south west, that it was thought unadvisable to move. Nearchus therefore brought his ships' companies on shore, and formed a camp, which he fortified with a rampart of stone as a defence against the natives, if they should be disposed to hostility. But his distress was great, for he was confined here four and twenty days. The people had only brackish water to drink, and the only supply they could find were oysters, cockles, and a sort of shell-fish called solênés, which greatly exceed in size all that are found in our seas [the Mediterranean].

Upon the cessation of the wind from the south west, the fleet once more set sail, and proceeded sixty stadia, when they anchored on a sandy shore. . . .

The country in the neighbourhood was low and marshy, and the cabins of the natives small and suffocating ; but, upon the approach of the fleet they collected in a body, and formed upon the shore, to prevent the strangers from landing. They were armed with lances, stoutly made, and nine feet long ; not pointed with iron, but hardened in the fire, and very sharp. Their number might be about six hundred.

Upon observing the opposition intended Nearchus formed his fleet out of reach of their javelins, but still within command of his archers ; for the javelins were heavy, and adapted rather for close fighting, than for annoyance at a distance.

As soon as he was ready for the charge, he selected such of his men as were most active and lightest armed, and the most expert swimmers, to plunge off from the ships at a signal. The first man who touched the ground with his feet was to halt in his place,

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and be looked to as the point upon which the line was to be formed; and from this point no one was to advance upon the enemy till the line was completed to three in file. But as soon as this was effected, they were to shout, and advance with their utmost speed to the attack. The whole was executed with precision; the men selected for the service sprang from the ships and swam vigorously towards the shore; they took their position, formed the line, and then rushed upon the enemy with the cry of Alala, the shout of war. In the meantime the people on board joined in the clamour; they plied their bows, they discharged their engines, and had the satisfaction to find that they reached the enemy.

The natives were not proof against such an assault. Many fell in their flight, many were taken prisoners, and some few escaped to the mountains.

When the prisoners were brought in, they were observed to be covered with hair upon their bodies, and their nails were like the claws of wild beasts; these served them instead of knives to divide their fish and other substances, or even wood of the softer sort. Their only instruments besides were of stone, for iron they had none. Their clothing consisted of the skins of beasts, or the larger kind of fish, when thick enough for the purpose.

At the Tomêrus the vessels were all drawn on shore, and those that had suffered in the voyage were repaired. Five days were employed in this service; on the sixth the fleet weighed, and proceeded three hundred stadia to Málana, which bounds the territory of the Orítæ. Of this tribe those who live inland are armed and habited after the Indian fashion; but their language, manners and customs are different. The whole navigation along this coast of the Kkhthuophagi was somewhat more than 10,000 stadia throughout which, as their name

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implies, the natives have little else to support life but fish; and yet, notwithstanding this, few of them are fishermen or have boats, or understand fishery as an art. But their supply is obtained by observing the tide of ebb, when they stretch out nets two stadia in length upon the shore, and wait the retreat of the water. These nets are formed out of the bark of the [cocoa] Palm Tree, for they spin the bark like flax. As the tide ebbs, where the shore is left dry, there are no fish; but in many places the water stands in pools, and there are quantities of fish, small indeed for the most part, but some large. The small and those of the softer kind they eat raw, as they take them out of the water. The large and dry they dry in the sun, and, when dry, reduce them to a powder like meal, which they knead up into leaves, or mix up in a liquid form like frumenty. Their very cattle are likewise fed with dried fish, for they have neither grass nor pasture. Crabs, oysters, and other shell fish are found in plenty. Salt is a natural production of the soil, and the tunny fish supplies them with oil. The generality of this tribe inhabit a country without a tree, without any produce of the field, and live entirely on fish: some few raise a small quantity of grain, which is rather a luxury than their ordinary diet, for their daily food is fish. The houses of the better sort are framed of the bones of whales cast on the shore; these they use instead of timber, and the flat bones for doors. The common people have only the refuse of the smaller bones [piled up] for an habitation.

Whales are found in the [Indian] ocean, of a much larger bulk than those in the Mediterranean. For Nearchus relates, that, as the fleet passed Kuidza, the water was seen thrown up to a great height, as if it had been raised like a water spout; and that, upon this strange appearance, they were alarmed,

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and enquired of the native pilots what might be the cause of this occurrence. They received for answer, that it proceeded from whales, sporting in the water, and blowing it up from their nostrils. The seamen however were so astonished, that the oars dropt from their hands. Nearchus immediately ran up through the fleet with his own ship, and, as he passed, directed the commanders to form a line with their head towards the monsters, as if they were going to engage ; at the same time ordering the people to raise the shout of war with all their force, to exert their strength to the utmost, and to dash the waves violently with their oars : upon this they recovered from their alarm, and advanced upon the signal as if going into an actual engagement. And now at the moment when they were close to the enemy, the clamour of the crews was carried to its highest pitch, the trumpets sounded the charge, and the dashing of the oars re-sounded on every side : upon this the monsters seen ahead plunged into the deep as if frightened by the attack, and rising again astern, continued to blow as magnificently as before. The danger was past, the seamen shouted and clapped their hands upon their unexpected deliverance, and the judgement of Nearchus was, as much their admiration as his fortitude.

Some of these whales are often left dry on the reflux of the tide, and some are driven on shore by storms. In this state they lie and putrefy till the flesh separates from the bones, which the natives employ in building their houses. Those taken out of the sides serve for beams and rafters, and the smaller ones for planks ; those in the jaws are flat and adapted to doors. The animal itself is often found near forty feet long.

ARRIAN, *The Voyage of Nearchus*
(trans. Wm. Vincent)

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AN AMBASSADOR FROM PERSIA TO INDIA, 1442

[THE rise of the Arabian Empire coincided with the coming of the Prophet Mohammed (570-632). A vast number of followers gathered round him and he became the conqueror of lands stretching from the borders of China to Morocco. The Moslem Empire arose when the Byzantine and Persian Empires were declining and the influence of its soldiers, geographers, and explorers lasted until the seventeenth century. In Europe the Arabs, known as Saracens, penetrated to Spain and France. They pushed far into Asia and voyaged to India and the Spice Islands in the east and down the coast of Africa to Madagascar in the south. Among their hardy mariners were expert pilots and navigators. But for the fortunate capture of an Arab pilot Vasco da Gama might never have found his way across the Indian Ocean.

Wealthy Arabian merchants brought all the treasures of the East to Baghdad, their capital. Its splendour and romance under the famous Caliph, Haroun-al-Raschid, is told in many fascinating descriptions and stories. Among these are the seven voyages of Sindbad the Sailor, probably composed in the early fourteenth century and undoubtedly based on the actual experiences of Arab travellers.

The first Portuguese explorers used Arab pilots and only succeeded in getting a footing in India, during the sixteenth century, because they were thought to be Moslems. When it was discovered the Portuguese were Christians they met with much hostility. The Arabs traded along the east coast of Africa and sent many expeditions to India but made no real attempt to settle. They maintained friendly relations and

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ambassadors went to and fro between the Persian court and the Indian states. One from Shah Rukh has left an account of his travels in the year 1442. It has been translated from the Persian into French, rendered into English by R. H. Major, and published (1857) by the Hakluyt Society.

This particular ambassador could never get used to the terrors of the sea. "At one time, through the driving of the waves, which resembled mountains, the vessel was lifted up to the skys; at another, under the impulse of the violent winds, it descended like divers to the bottom of the waters. . . . The planks of which it was composed . . . were on the point of becoming divided like the separate letters of the alphabet." He gives a picturesque account of the wonders that he saw, takes great delight in the sound of new names, and relates vividly the terrors of a man who had little love for the sea, especially in the season of monsoons.]

Ormuz, which is also called Djerrun, is a port situated in the middle of the sea, and which has not its equal on the surface of the globe. The merchants of seven climates, from Egypt, Syria, the country of Roum, Azerbijan, Irak-Arabi, and Irak-Adjemi, the province of Fars, Khorassan, Ma-wara-annahar, Turkistan, the kingdom of Deshti-Kaptchack, the countries inhabited by the Kalmucks, the whole of the kingdoms of Tchin and Matchin, and the city of Khanbâlik, all make their way to this port . . . they bring hither those rare and precious articles which the sun, the moon and the rains have combined to bring to perfection, and which are capable of being transported by sea. . . .

I sojourned in this place for the space of two months; and the governors sought all kinds of pretexts to detain me; so that the favourable time

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for departing by sea, that is to say, the beginning or middle of the monsoon, was allowed to pass, and we came to the end of the monsoon, which is the season when tempests and attacks from pirates are to be dreaded. Then they gave me permission to depart. As the men and horses could not all be contained in the same vessel, they were distributed among several ships. The sails were hoisted and we commenced our voyage.

As soon as I caught the smell of the vessel, and all the terrors of the sea presented themselves before me, I fell into so deep a swoon that for three days respiration alone indicated that life remained within me. When I came a little to myself the merchants . . . cried with one voice that the time for navigation was passed and that everyone who put to sea at this season was alone responsible for his death, since he voluntarily placed himself in peril. All, with one accord, having sacrificed the sum which they had paid for freight in the ships, abandoned their project, and after some difficulties disembarked at the port of Muscat. For myself, I quitted this city and went to a place called Kariat. . . .

I determined to continue my voyage in a vessel, which was leaving for Hindoostan. . . . Before long a favourable breeze began to blow, and the vessel floated over the surface of the water with the rapidity of the wind. . . . Finally, after a voyage of eighteen days and as many nights, by the aid of the supreme king and ruler, we cast anchor in the port of Calicut. . . .

As soon as I landed at Calicut I saw beings such as my imagination had never depicted the like of.

Extraordinary beings, who are neither men nor devils,

At sight of whom the mind takes alarm ;

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If I were to see such in my dreams
My heart would be in a tremble for many years.
I have had love-passages with a beauty, whose face
was like the moon; but I could never fall in love
with a negress.

The blacks of this country have the body nearly naked; they wear only bandages round the middle. . . . In one hand they hold an Indian poignard, which has the brilliance of a drop of water, and in the other a buckle of ox-hide, which might be taken for a piece of mist. The costume is common to the king and to the beggar. As to the Mussulmanns they dress themselves in magnificent apparel after the manner of the Arabs, and manifest luxury in every particular. After I had had an opportunity of seeing a considerable number of Mussulmanns and Infidels I had a comfortable lodging assigned to me, and after the lapse of three days was conducted to an audience with the king. I saw a man with his body naked, like the rest of the Hindus. The sovereign of this city bears the title of *Sameri*. When he dies it is his sister's son who succeeds him, and his inheritance does not belong to his son, or his brother, or any of his relations. No one reaches the throne by means of the strong hand.

The humble author of this narrative having received his audience of dismissal, departed from Calicut by sea. After having passed the port of Bendinaneh, situated on the coast of Melibar, he reached the port of Mangalor, which forms the frontier of the kingdom of Bidjanagar. After staying there two or three days he continued his route by land. At a distance of three parasangs from Mangalor he saw a temple of idols, which has not its equal in the universe. It is an equilateral square, of about ten ghez in length ten in breadth and five in height.

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It is entirely formed of cast bronze. It has four *estrades*. Upon that in the front stands a human figure, of great size, made of gold; its eyes are formed of two rubies, placed so artistically that the statue seems to look at you. The whole is worked with wonderful delicacy and perfection.

After passing this temple I came each day to some city or populous town. At length I came to a mountain whose summit reached the skies, and the foot of which was covered with so great a quantity of trees and thorny underwood, that the rays of the sun could never penetrate the obscurity, nor could the beneficial rains at any time reach the soil to moisten it. Having left this mountain and this forest behind me, I reached a town called Belour, the houses of which were like palaces and its women reminded one of the beauty of the Houris.

Having sojourned in this town for the space of two or three days we continued our route, and at the end of the month of Zou'lhidjah [end of April] we arrived at the city of Bidjanagar. The king sent a numerous cortège to meet us, and appointed us a very handsome house for our residence. . . .

One day some messengers sent from the palace of the king came to seek me, and at the close of that same day I presented myself at Court, and offered for the monarch's acceptance five beautiful horses, and some tokouz of damask and satin. The prince was seated in a hall, surrounded by the most imposing attributes of State. Right and left of him stood a numerous crowd of men ranged in a circle. The King was dressed in a robe of green satin, around his neck he wore a collar, composed of pearls of beautiful water and other splendid gems. He had an olive complexion, his frame was thin and he was rather tall; on his cheeks might be seen a slight down, but there was no beard on his chin. The

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expression of his countenance was extremely pleasing. On being led into the presence of this prince, I bowed my head three times. The monarch received me with interest, and made me take a seat very near him. When he took the august letter of the emperor, he handed it to the interpreter, and said: "My heart is truly delighted to see that a great king has been pleased to send me an ambassador." As the humble author of this narrative, in consequence of the heat, and the great number of robes in which he was dressed, was drowned in perspiration, the monarch took pity on him, and sent him a fan, similar to the khata which he held in his hand. After this a salver was brought, and they presented to the humble author two packets of betel, a purse containing five hundred *fanoms*, and twenty *mithkaks* of camphor. Then, receiving permission to depart, he returned to his house.

HAKLUYT SOCIETY (trans. from Persian)

VIKING EXPLORERS

[WHILE explorers were feeling their way from the Mediterranean along the coasts of Africa and southern Asia, other discoveries were being made far to the north. The Vikings may justly claim to be the first seamen to make long voyages across the open sea. Their long ships were fine seaworthy vessels and the hard life in grim surroundings lived by these intrepid warriors encouraged them to make plundering raids on their neighbours. They sailed eastwards, up the Baltic to Russia. In the ninth and tenth centuries they settled in western Europe, in Normandy and Great Britain, and moved through the Mediterranean, until we find them trading with the merchants of

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Baghdad, exchanging furs, amber, hides and oil for Oriental luxuries which reached Europe through the Baltic.

During the ninth century these Norsemen colonized Iceland and later, under their leader, Eric the Red, explored the southern part of Greenland and eventually settled there. Iceland was the starting-point for their most ambitious voyages to the West and we shall read how Bjarni Herjulfson travelled far to the south-west and sighted the coast of America. Leif, the son of Eric the Red, set out in 1002 to explore this new land. Helluland—the land of Flat Stone—is Labrador or Newfoundland, and Markland—Woodland—is the coast of Nova Scotia. Travelling much further south, they landed in Wineland, so called because of the grapes they found there. This district has been identified as the estuary of the Hudson River, the approach to New York, discovered by the Norsemen 500 years before Columbus discovered the West Indian Islands. Leif's brother, Thorvald, led yet another expedition to the same country and found the camp where Leif had landed. The hostile natives probably prevented any idea of colonisation and Thorvald himself died from wounds received in a skirmish.

The history of these early voyages was handed down in sagas—stories originally told by word of mouth. They were first collected and written down in the fourteenth century and this modern translation well recaptures the spirit of Icelandic literature.]

Bjarni arrived in his ships at Eyra in the summer of the same year in the spring of which his father had sailed away. Bjarni was much concerned at the news and would not discharge his cargo. His crew thereupon asked him what he meant to do; he

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replied that he meant to keep to his custom of passing the winter with his parents, "and I will," said he, "take my ship on to Greenland, if you will accompany me." They all said that they would abide by his decision; upon which Bjarni remarked, "Our voyage will be considered rash, since none of us have been in Greenland waters." Notwithstanding this they put to sea as soon as they had got ready, and they sailed for three days before the land was laid; but then the fair wind ceased, and north winds and fogs came on, and they did not know where they were going, and this went on for many days. After this they saw the sun, and so were able to get their bearings, whereupon they hoisted sail, and after sailing that day they saw land, and they discussed among themselves what land this could be, but Bjarni said he fancied that it could not be Greenland. They asked him whether he would sail to this land or not. "I am for sailing in close to the land," he said, and on doing so they soon saw that the land was not mountainous, and was covered with wood, and that there were small knolls on it, whereupon they left the land on the port side, and let the sheet turn towards it. Then, after sailing two days they saw another land. They asked Bjarni if he thought this was Greenland; he said that he did not think this was Greenland any more than the first place, "for it is said that there are very large glaciers in Greenland." They soon neared this country and saw that it was a flat country and covered with wood. At this point the fair wind dropped, whereupon the crew suggested that they should land there: but Bjarni would not. They considered that they were short of both wood and water. "You are in no want of either," said Bjarni, but he got some abuse for this from his crew. He ordered them to hoist sail, which was done, and they turned the bows

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from the land, and sailed out to sea for three days before a south-westerly breeze, when they saw the third land: now this land was high and mountainous, with ice upon it. So they asked if Bjarni would put in there, but he said that he would not, since—as he put it—this land appeared to him to be good for nothing. Then without lowering sail they kept on their course along the coast, and saw that it was an island: once more they turned the bows away from the land, and held out to sea with the same breeze; but the wind increased so that Bjarni told them to reef, and not crowd more sail than their ship and rigging could stand. They now sailed for four days, when they saw the fourth land. Then they asked Bjarni if he thought this was Greenland, or not. Bjarni replied, “This is most like what was told me of Greenland, and here we will keep our course towards the land.” So they did, and that evening they came to land under a cape, which had a boat on it, and there on that cape lived Herjulf, Bjarni’s father, and it is from him that the cape received its name, and has since been called Herjulfness.

Bjarni now went to his father, and gave up voyaging, and he was with his parents as long as Herjulf was alive, and afterwards he succeeded his father and lived there.

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Now the next event to be recorded (after the death of Olaf Tryggvason, September 1000) is that Bjarni Herjulfson came over from Greenland to Earl Eric (who became the ruler of a large part of Norway after Olaf’s death), and the earl gave him a good reception. Bjarni told the story of his voyage when he saw the [strange] lands, but people thought that he had been lacking in curiosity, since he had nothing

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to report about those countries, and some fault was found with him on this account. Bjarni was made an officer of the earl's court but the following summer he went out to Greenland.

There was now much talk of exploration. Leif, Eric the Red's son from Brattahlid, went to Bjarni Herjulfson and bought a ship of him and engaged a crew of thirty-five men. Leif asked his father Eric still to be leader of the expedition. Eric excused himself, saying that he was now an old man, and less fitted to bear all the hardships than formerly. Leif said that he was still the member of the family who would bring the best luck; Eric thereupon gave way to Leif, and as soon as they were ready for it he rode from home, and came to within a short distance of the ship. The horse which Eric was riding stumbled, and he fell off and hurt his foot. Then Eric said, "I am not fated to discover more countries than this in which we are now settled, and we ought not to bear one another company any longer." So Eric went home to Brattahlid, but Leif went on board with his companions, thirty-five men. There was a Southerner [German] on the expedition called Tyrker.

Now they prepared their ship, and when they were ready they put to sea, and they found first the country which Bjarni found last. There they sailed up to the land, and having cast anchor and lowered a boat went ashore, and saw no grass there. The background was all great glaciers, and all the intermediate land from the sea to the glaciers was like one flat rock, and the country seemed to them destitute of value. Then Leif said, "We have not failed to land, like Bjarni; now I will give this country a name, and call it Helluland (the land of flat stone)." Thereupon they returned on board, after which they sailed to sea and discovered the

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second land. Again they sailed up to the land and cast anchor, then lowered the boat and went ashore. This land was low-lying and wooded, and wherever they went there were wide stretches of white sand, and the slope from the sea was not abrupt. Then Leif said, "This land shall be given a name from its resources, and shall be called Markland (woodland)," after which they returned to the ship as quickly as possible. And they sailed after that in the open sea with a north-east wind, and were out two days before they saw land, towards which they sailed, and having come to an island which lay to the north of the mainland they landed on it, the weather being fine, and looked round; and they perceived that there was a dew on the grass, and it came about that they put their hands in the dew, and carried it to their mouths, and thought that they had never known anything so sweet as that was. Then they went back to the ship, and sailing into the sound which lay between the island and the cape which ran north from the mainland they steered a westerly course past the cape. It was very shallow there at low tide, so that their ship ran aground, and soon it was a long way from the ship to the sea. But they were so very eager to get to land that they would not wait for the tide to rise under their ship, but hurried ashore where a river came out of a lake; but when the sea had risen under their ship they took the boat and rowed to the ship, and took her up the river and afterwards into the lake, where they cast anchor, and carrying their leather kitbags ashore they put up shelters, but later, on deciding to pass the winter there, they made large houses.

There was no want of salmon, either in the river or the lake, and bigger salmon than they had seen before; the amenities of the country were such, as it seemed to them, that no cattle would need fodder

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there in the winter; there came no frost in the winter, and the grass did not wither there much. Day and night were more equally divided there than in Greenland or Iceland: on the shortest day the sun was up over the [Icelandic] marks for both noons and breakfast time.'

Now when they had finished building their houses, Leif said to his men, "Now I will divide our party into two, and have the country explored: and one half shall stay at home in camp while the other explores the country, going no further than they can return by the evening, and not separating." And so for a time they did this, Leif sometimes going with the explorers and at others staying at home in camp. Leif was a big, strong man, the handsomest of men in appearance, and clever; in fact he was in all respects an excellent commander.

It happened one evening that a man of their party was missing, and this was Tyrker the Southerner. Leif was much distressed at this, for Tyrker had been long with his father and him, and had been very fond of Leif as a child: so now Leif, after finding great fault with his men, prepared to look for him, taking a dozen men with him. But when they had got a little way from camp Tyrker came towards them, and was received with joy. Leif saw at once that his foster-father was in good spirits.

Tyrker had a projecting forehead and a very small face with roving eyes; he was a small and insignificant man, but handy at every kind of odd job.

Then Leif said to him, "Why are you so late, my foster-father, and why did you separate from your companions?" Tyrker at this spoke for a long time in German, rolling his eyes and grimacing, but the others did not distinguish what he was saying. But a little later he said in Norse, "I did not go much further than you, [but] I have found something

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fresh to report. I found vines and grapes." "Is that true, foster-father?" said Leif. "Certainly it is true," he replied, "for I was born where there was no lack of vines or grapes."

Now they slept that night but in the morning Leif said to his crew, "We will now do two things keeping separate days for each; we will gather grapes and cut down vines, and fell wood, to make a cargo for my ship," and this suggestion was adopted. The story goes that their pinnacle was full of grapes. So a cargo was cut for the ship, and in spring they made ready and sailed away, and Leif gave the country a name according to its resources, and called it Wineland.

So after this they put to sea, and the breeze was fair till they sighted Greenland, and the mountains under its glaciers. Then a man spoke up and said to Leif, "Why are you steering the ship so much into the wind?" "I am paying attention to my steering," replied Leif, "but to something else as well: what do you see that is strange?" They said they could see nothing remarkable. "I do not know," said Leif, "whether it is a ship or a reef that I see." Then they saw it, and said that it was a reef. But Leif was longer sighted than they, so that he saw men on the reef. "Now," said Leif, "I wish that we should beat up wind, so as to reach them if they need our help and it is necessary to assist them, and if they are not peaceably disposed we are masters of the situation and they are not." So they came up to the reef, and lowered their sail and cast anchor: and they launched a second dinghy that they had with them. Then Tyrker asked who was the captain [of the shipwrecked party]. "His name is Thori," was the reply, "and he is a Norseman, but what is your name?" Leif told his name. "Are you a son of Eric the Red of

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Brattahlid?" said Thori. Leif assented. "Now," said Leif, "I will take you all on board my ship, and as much of your stuff as the ship can hold." They agreed to these terms, and afterwards they sailed to Ericsfjord with this freight, until they came to Brattahlid where they unloaded the ship. After that Leif invited Thori and Gudrid his wife, and three other men to stay with him, and procured lodgings for the rest of the crews, both Thori's men and his own. Leif took fifteen men from the reef; he was subsequently called Leif the Lucky. So Leif gained both wealth and honour.

Now there was much discussion of Leif's expedition to Wineland, and Thorvald, his brother, thought that the exploration of the country had been confined to too narrow an area. So Leif said to Thorvald, "If you wish, brother, you shall go to Wineland in my ship: but I wish the ship to go first for the wood which Thori had on the reef. And this was done. Thereupon Thorvald prepared for this expedition, taking thirty men by the advice of Leif, his brother. Afterwards they made their ship ready and held out to sea, and there is no report of their voyage before they came to Wineland to Leif's camp. There they laid up their ship, and remained quiet that winter, catching fish for their food. But in the spring Thorvald told them to make ready their ship, and ordered the ship's pinnace with some of the crew to go to the west of the country and explore there during the summer. It seemed to them a fine wooded country, the trees coming close down to the sea, and there were white sands. There were many islands, and many shoals. They found no traces either of men or beasts, except that on an island to the west they found a wooden barn. Finding no

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further human handiwork they returned, and came to Leif's camp in the autumn. But the next summer Thorvald sailed to the east with his trading ship, and along the more northerly part of the country : then a sharp storm arose off a cape, so that they ran ashore, breaking the keel under their ship ; so they made a long stay there to repair their vessel. Then Thorvald said to his companions, " Now I wish that we should raise up the keel here on the cape, and call it Keelness," and so they did. Afterwards they sailed away thence and eastward along the coast and into the nearest fjord mouths, and to a headland which ran out there : it was all covered with wood. Then they moored their ship, and put out the gangway to land, and then Thorvald went ashore with all his crew. Then he remarked, " This is a beautiful spot, where I should like to make my home." After this they returned to the ship, and saw on the sands inside the headland three lumps, and on approaching they saw three canoes of skin, with three men beneath each. Thereupon they divided their party, and laid hands on all of them, except one who escaped with his canoe. They killed the eight, and afterwards went back to the headland, when they saw inside the fjord some mounds, which they took to be dwelling-places. After this there came over them so great a heaviness that they could not keep awake, and they all fell asleep. Then came a cry above them, so that they all woke up, and the cry was, " Awake, Thorvald, and all your company, if you value your life : and return to your ship with all your men, and leave the land with all speed." At that there came from within the fjord countless skin canoes, which made towards them. So Thorvald said, " We must set the war-shields over the side, and defend ourselves as well as we can, while assuming the offensive but little." So they did, but the savages, after shooting

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at them for a while, afterwards fled away, each as quickly as he could. Then Thorvald asked his men if they were wounded at all; they said there were no casualties. „“ I have got a wound under the arm,” said he; “an arrow flew between the gunwale and the shield under my arm and here it is, and it will be my death. Now my advice is that you prepare to go away as quickly as possible, after carrying me to the headland which I thought the best place to dwell in: maybe it was the truth that came into my mouth that I should stay there awhile. Bury me there with a cross at my head and at my feet, and call it Crossness hereafter for ever.” Greenland was then converted, though Eric the Red died before conversion.

Now Thorvald died, but they carried out all his instructions, after which they went and met their companions, and told each other such tidings as they knew, and they stayed there that winter, gathering grapes and vines for their ship. Then in the spring they prepared to go back to Greenland, and arrived with their ship in Ericsfjord, with great news to tell Leif.

G. M. GATHORNE-HARDY, *The Norse Discoverers of America* (trans. from Icelandic)

EXPLORATION TO THE FAR EAST

MARCO POLO SAILS FROM CHINA

[MARCO POLO (1256-1323) was a famous Venetian explorer who made journeys to China and through most of eastern and southern Asia. He wrote an account of his travels, setting down the many wonders he had seen and, although they were largely discredited by his contemporaries, most of them have since been confirmed. He travelled with his father and uncle, Niccolo and Matteo, who had made an earlier visit to the Chinese Emperor. The Venetians reached China after having "toiled no less than three and a half years on the way." Marco Polo set to work to learn "the customs, languages, and manners of writing" and became such a favourite at the Chinese court of Kublai Khan that he was employed for "no less than seventeen years" on many missions. They gave him excellent opportunities to travel and gain information but he was not allowed to return home.

Eventually the Polos were commissioned to escort a princess—seventeen years old, most beautiful and charming—to Persia, and Marco decided to make the journey by sea. A squadron of fourteen ships set sail and after three months reached Java. They stayed five months in Sumatra and had to defend themselves against the cannibals. Eventually they reached Ceylon, made their way northwards up the western coast of India and so, months later, to Persia. We read that, not counting the sailors, out of 600 passengers "all died except eighteen," but the

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beautiful princess Coachim arrived safely.

After an absence of twenty-five years the Polos got back to Venice. Sir Henry Yule, Marco Polo's biographer, says of him and his sea journey home from China, he was "the first to speak of that Museum of Beauty and Wonder, still so imperfectly ransacked, the Indian Archipelago, source of those aromatics then so highly prized and whose origin was so dark; of Java the Pearl of Islands; of Sumatra with its many kings, its strange costly products, and its cannibal races; of the naked savages of Nicobar and Andaman; of Ceylon, the Isle of Gems, with its Sacred Mountain and its Tomb of Adam; of India the Great, not as a dream land of Alexandrian fables, but as a country seen and partially explored."]

You must know that, on leaving the kingdom of Chanba, one sails 1500 miles south-south-east, and reaches a very large island called Java. According to experienced sailors who know the matter well, it is the largest island in the world, having a compass of quite 3000 miles. It belongs to a great King. They are idolaters and pay tribute to no one. This island is immensely rich. They have pepper, nutmegs, spikenard, galingale, cubebs, cloves, in a word all the precious spices one can think of. Great numbers of ships go thither, with many traders who buy sundry wares, from which they obtain much profit and gain. In this island there is such wealth, that no man in the world could calculate or describe it. And I will add that the Great Kaan was never able to take it on account of the great distance, and the dangers of the voyage thither. The merchants of Zaitun and Manji have in the past obtained great profit from the trade with this island, and still do so. The greater part of the spices sold in

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the world, comes from this island. Now I have told you of this island, and will say no more about it, but will proceed.

On leaving this island of Java, one sails between south and south-west for 700 miles, after which one finds two islands, one larger and one smaller. The one is called Sondur and the other Condur. They are two uninhabited islands and therefore we will pass on.

One leaves these islands and proceeds for some 500 miles to the south-east. One then reaches a continental province, called Lacoc, which is very large and rich. There is a great King in it. They are idolaters, and have a language of their own. They pay tribute to no one, for their land is so situated that no one can enter it to do any mischief. If it were possible to do so, the Great Kaan would soon make it submit to him. In this country there grow immense quantities of brazil-wood and ebony. They have great abundance of gold, so great, indeed, that no one could believe it without seeing it. They have elephants, and game, both beasts and birds, in great plenty. From this region come all the porcelain shells that are used as money in different countries, as I have told you.

There is nothing else worth mentioning, except that it is a wild region, whither few travellers go. The King himself does not wish anyone to go there, so that no one may know the wealth it possesses, and what its conditions are.

We will therefore leave this place, and proceed telling you of other things.

You must know that when one leaves Lacoc, one sails 500 miles to the south, and reaches an island called Pentan, which is a very wild place. All its forests are of odoriferous trees of great value. Not far off, there are two other islands.

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Let us leave this place, and between these two islands for some 60 miles the water is only about four paces deep, and big ships, when they pass through, must haul up their rudders, because they draw nearly four paces of water. After those 60 miles, one sails on to the south-east for some 30 miles; then one reaches an island that forms a kingdom; both it and its capital are called Malaiur. They have a king and a language of their own. The city is very large and noble. There is a great deal of trade in spices and other wares. For there is great abundance in that island of such products.

There is nothing else worth mentioning. And so we will leave this place and proceed. We will tell you of Java the Lesser, as you shall hear.

After leaving the island of Pentan, and sailing some 100 miles to the south-east, one finds the island of Java the Lesser. But you must understand that it is not so small but that it has a compass of 2000 miles. We will tell you all about this island in detail.

You must also know that in this island there are eight kingdoms and eight crowned Kings. All the islanders are idolaters and have a language of their own; indeed, each of the eight kingdoms has a language of its own. In this island there are immense riches—abundance of precious spices, aloes-wood, brazil-wood, ebony, and many other kind of spices, that, on account of the great distance, and the dangers of the voyage, never reach our countries, and are only sent to the provinces of Manji and Cathay.

Now I intend to tell you of the nature of these peoples, one by one.

But first of all I wish to tell you one thing that will certainly amaze you; you must know that this island is so far to the south that the North Star is never to be seen there, neither little nor much. And now let us return to the subject of the peoples.

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And we will begin by speaking of the kingdom of Ferlec. You must know that in the kingdom of Ferlec the people were all idolaters, but, on account of the Saracen traders who frequent the kingdom with their ships, they have been converted to the Law of Mahomet—only, however, the inhabitants of the city. The inhabitants of the mountains are like beasts, for I assure you that they eat human flesh, and all other kinds of flesh, both clean and unclean. They worship the most varied things; the first thing they see on getting up in the morning, is to them an object of worship. I have told you of the kingdom of Ferlec. I will now tell you of the kingdom of Basman.

On leaving this kingdom of Ferlec, one enters the kingdom of Basman. This is an independent kingdom, with a language of its own; but they are people who have no law, unless it be that of brute beasts. They call themselves lieges of the Great Kaan, but pay him no tribute, as they are so far away that the Great Kaan's armies could never go there. Yet all the people of the island call themselves his subjects, and at times, by means of travellers passing through, send him something beautiful or curious as a gift, and especially a certain kind of black goshawk of theirs.

They have wild elephants and great numbers of unicorns, hardly smaller than elephants in size. Their hair is like that of a buffalo, and their feet like those of an elephant. In the middle of the forehead they have a very large black horn. You must know that they do not wound with their horn, but only with their tongue and their knees. For on the tongue they have very long, sharp spines, so that when they become furious against someone, they throw him down and crush him under their knees wounding him with their tongue. Their head is like

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that of a wild boar, and is always carried bent to the ground. They delight in living in mire and in mud. It is a hideous beast to look at, and in no way like what we think and say in our countries, namely a beast that lets itself be taken in the lap of a virgin. Indeed, I assure you that it is quite the opposite of what we say it is.

They have great numbers of monkeys of many different and strange kinds. They also have goshawks as black as crows; they are very big, and excellent for fowling.

I also wish you to know that the pygmies that some travellers assert they bring from India, are a great lie and cheat, for I may tell you that these creatures, whom they call men, are manufactured in this island; and I will tell you how. You must know that in this island there is a kind of very small monkey, with a face like a man's. They take these monkeys, and, by means of a certain ointment, remove all their hairs; then they stick into their chins certain long hairs to look like a beard. Then they dry them. As the skin dries, the holes into which the hairs have been stuck, close, so that the hairs look as if they had grown there naturally. Further, as their feet, hands and certain other members are not quite the same as those of a man, they pull and shape them with their hands, and so make them similar to those of a man. Then they put these beasts out to dry, and shape them, daubing them with camphor and other things, until they look as if they had been men. But it is a great cheat, since they are manufactured even as I have told you. For such tiny men as these would seem to be, have never been seen in India or in any other more savage country.

But we will say no more of this kingdom, for there is nothing else worth mentioning. We will

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therefore cease speaking of it, and tell you of another kingdom, called Samatra.

You must know then, that, when one leaves the kingdom of Basman, one enters into the kingdom of Samatra, which is situated in this same island. Here Marco Polo resided in person five months, because the weather prevented him from continuing his voyage. Here, too, the Northern Star does not appear. Nor do the North-west Stars appear, neither much nor little. They are savage idolaters and have a rich and powerful king. They declare themselves lieges of the Great Kaan.

I will tell you in what way Marco and his men lived here five months. Know then, that, during these five months, Messer Marco Polo, who had landed with quite 2000 followers, had great trenches dug between his camp and the interior of the island. This was out of fear of these bestial people who devour men. The trenches abutted at either end on the harbour. On them he had five timber towers built, like battlemented scaffolds. Thus he remained five months with his men, protected by these fortifications. This was possible because of the great amount of timber in the place. By and by the islanders started coming to sell victuals and other things, for mutual confidence was springing up between them.

In this region there is the finest fish in the world. They have no wheat, and live on rice. They have no wind, except such as I shall tell you of. You must know that they have a certain kind of tree, from which they cut a branch, hanging a large pot to the stump that is left; I assure you that in the course of a day and a night the pot is full. And this wine is excellent to drink; indeed its virtue is such that it cures dropsy, phthisis and spleen. Their trees are somewhat like small date-palms, and have

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very few branches; if one of these branches is cut at the proper season, you get a fine supply of excellent wine, as I have said. I will add that when the stump gives no more wine, they water the trees, making the necessary amount of water flow along little conduits from neighbouring streams. After an hour of this, the liquid begins to flow again, not, indeed, as red as before, but lighter in colour. Thus they have both red wine and white.

They have great quantities of Indian nuts, as big as a man's head, and delicious to eat. When they are fresh, these nuts have, inside the kernel, a certain liquid that in taste and sweetness is better than any wine or any other drink that ever was drunk.

They eat any kind of flesh, both clean and unclean. . . .

Fansur is an independent kingdom. They have a King of their own, are idolaters, and declare themselves lieges of the Great Kaan. They also belong to the island of which we have been speaking. In this kingdom grows the best camphor in the world, called Fansur Camphor; it is more costly than any other, for I assure you, it is sold for its weight in gold. They have no wheat or any other kind of corn, but live on rice and milk. They have wine, that they get from trees, such as I have described before.

I will tell you another thing which is truly a wonder. You must know that in this province they have tree-flour, and I will tell you what it is like. They have a kind of very big, tall tree, that is full of flour inside. The wood of these trees amounts perhaps to three finger-breadths of bark, and all the rest is pith, namely flour. And they are such big trees, that it takes two men to embrace one of them. This flour is put into tubs full of water and stirred with a stick. The chaff and rubbish come up to

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the surface, and the flour sinks to the bottom. After this, the water is drained away, and the clean flour is left on the bottom of the tub. Then it is dressed, and various kinds of eatables are made, such as cakes, and so forth, of the kind that we prepare with wheat-flour. They are very good. Messer Marco and his companions know it well by experience, as they repeatedly ate this bread; moreover, Messer Marco brought with him some of the flour, and also some bread made with it. This bread tastes rather like barley-bread.

The wood of these trees is as hard as iron, and sinks like iron, if thrown into water. This wood will split straight down from the top to the bottom, like a cane. When the flour has been removed from the trees, the wood is left, some three fingers thick, as has been said. With this wood, the people make darts—short ones, not long ones, for if they were long, no one could wield them, or even hold them, the wood being so heavy. They sharpen the tips of these darts, and then scorch the point a little in fire. Thus prepared, these darts are superior to iron ones for piercing any armour.

Now we have told you about the kingdoms in this part of the island. Of the remaining kingdoms, in the other parts of the island, we will say nothing, never having been there. . . .

One sails westwards for 100 miles, reaching a very large and wealthy island called Angaman. They have no King. They are idolaters and live like wild beasts. And I will tell you of a race of men, which is quite worth mentioning in our book. You must know in very truth that all the men in this island have heads like dogs, and teeth and eyes also like dogs. I assure you that, as regards their heads, they all look like big mastiffs. They have abundance of spices. They are a very cruel people. They eat men,

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all those they can catch, as long as they are not of their race. They have great abundance of every variety of spices. They feed on rice, milk and all kinds of flesh. They also have Pharaoh's nuts, apples of Paradise, and many other fruits, different from ours.

This island lies in so swift flowing and deep a sea, that ships can neither anchor there nor proceed on their way, for the sea makes them drift into a bay they can never get out of again. And this is the reason : this sea, in its violence, eats its way into the land, uprooting trees and washing them out into the bay. The number of trees constantly being washed out into the gulf, without ever leaving it again, is truly prodigious. Thus ships entering the gulf get so entangled among these trees, that they cannot move, and so they remain there for ever.

We have now told you of this island, and of its strange inhabitants. We will therefore leave it, and tell you of other things. We will speak of an island called Seilan.

On leaving the island of Angaman, one sails, for about 1000 miles, west-south-west, reaching the island of Seilan, which, as regards size, is without doubt the largest in the world. And this is why : it has a compass of 2400 miles. Once, indeed, it was larger still, with a compass of 3600 miles, as you can see in the charts of the mariners of those seas. But the north wind blows there with such violence, that it has made the sea submerge a considerable part of the island ; and this is the reason why it is no longer so big as it once was. You must also know that, on the side struck by the north wind, the island is very low and flat, so that when one reaches it on a ship from the high seas one does not see the land until one is upon it.

We will now tell you about this island. They have a king called Sendeman. They are idolaters.

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They pay tribute to no one. They go all naked, except that they cover their middles. They have no kind of grain, except rice; they also have sesame, with which they make oil. They live on flesh, milk and rice. In this island they also have the tree-wine of which I have told you before. They have immense quantities of brazil-wood—the best in the world.

We will now leave this subject and tell you of the most precious thing in the world. You must know that in this island alone, and in no other part of the world, are born the noble and precious rubies. Sapphires, topazes, amethysts, garnets and many other precious gems are also born there. Now, I will tell you that the King of this province possesses the most beautiful ruby in the world—the finest that ever was or will be seen. I will tell you what it is like. Know then, it is about a palm long and quite as thick as a man's arm. It is the most resplendent thing on earth to look at. It has not the smallest flaw. It is as red as fire. It is of such immense value that it could hardly be purchased for money. And I assure you that the Great Kaan sent envoys to this King, to tell him that he wished to buy the ruby, and that, if he would but give it, he himself would pay the price of a city. But the King said that he would not give it for anything in the world, because it had belonged to his ancestors. For this reason the Great Kaan was in no wise able to obtain it.

The islanders are no warriors, but wretched and cowardly people. If it chance that they need soldiers, they employ those of other countries and especially Saracens.

There is nothing else worth mentioning, and so we will leave this place, and proceed, telling you of Maabar.

On leaving the island of Seilan, one sails some sixty miles to the west, reaching the great province

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of Maabar, known as Greater India—the noblest and richest province in the whole world.

BENEDETTO, *Travels of Marco Polo*

IBN BATTUTA : THE GREATEST MOSLEM EXPLORER

[IBN BATTUTA began his travels in 1325, fifty years after Marco Polo. He journeyed further than anyone of his time and for hundreds of years after. His first journeys were through Arabia and the Western Sudan, of which he was the first explorer. His land travel later took him across Africa from the east to the west and from the north to the river Niger, where he was astonished at the huge hippopotami, “taking them to be elephants.” He travelled down the east coast of Africa as far as Mozambique and describes the rich city of Mogadoxa. In the Persian Gulf he writes of Hormuz (Ormus)—“a large and fine city with busy markets,” where all the riches of India and the East were on sale. Some of the most interesting parts of his narrative deal with the great ports of the Indian Ocean, for he was a careful observer and gives vivid descriptions and accurate information of the places, trading ships, and important personages of the time.

India had a particular fascination for him and he spent eight years there, being welcomed by the Emperor at Delhi and treated as an important Moslem ambassador. Ibn Battuta mentions some of his atrocities and describes him as “the fondest of making gifts and of shedding blood.” Ibn Battuta accompanied an embassy to the court of China at Peking and gives further vivid impressions of trading ships in the China Sea—junks with a 1000 men and

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ten to fifteen men to each oar. His voyages to Ceylon, the Maldiv Islands, and Java are as interesting as those of Marco Polo.

In 1349 he dictated his memoirs by order of the Sultan and so left us one of the greatest travel books.]

We continued on our way to Nadhurbár [Nandurbar], a small town inhabited by the Marhatas, who possess great skill in the arts and are physicians and astrologers. The nobles of the Marhatas are Brahmins. Their food consists of rice, vegetables, and oil of sesame, and they do not hold with giving pain to or slaughtering animals. They wash themselves thoroughly before eating and do not marry among their relatives, unless those who are cousins six times removed. Neither do they drink wine, for this in their eyes is the greatest of vices. The Muslims in India take the same view, and any Muslim who drinks it is punished with eighty stripes, and shut up in a matamore for three months, which is opened only at the hours of meals.

From this town we journeyed to Sághar [Songarh], which is a large town on a great river of the same name [Tapti]. Its inhabitants are upright, religious, and trustworthy, and people go there to participate in the blessing they bestow, and because the town is exempt from taxes and dues. Thereafter we travelled to the town of Kinbáya [Cambay], which is situated on an arm of the sea resembling a river; it is navigable for ships and its waters ebb and flow. I myself saw the ships there lying on the mud at ebb-tide and floating on the water at high-tide. This city is one of the finest there is in regard to the excellence of its construction and the architecture of its mosques. The reason is that the majority of its inhabitants are foreign merchants who are always building fine mansions and magnificent mosques and vie with one

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another' in doing so. We journeyed from this town to Káwá, which is on a tidal bay also, and is in the territories of the infidel rája Jálansi, of whom we shall speak later. Thence we went to Qandahár, a large town belonging to the infidels and situated on a bay. The sultan of Qandahár is an infidel called Jálansi, who is under Muslim suzerainty and sends a gift to the King of India every year. When we reached Qandahár he came out to welcome us and showed us the greatest honour, himself leaving his palace and installing us in it. The principal Muslims at his court came to visit us, such as the children of the Khwája Bohra. One of these is the shipowner Ibráhim, who possesses six vessels of his own.

At Qandahár we embarked on a ship belonging to this Ibráhim, called *al-Jagir* . . . which had a complement of fifty rowers and fifty Abyssinian men-at-arms. These latter are the guarantors of safety on the Indian Ocean; let there be but one of them on a ship and it will be avoided by the Indian pirates and idolaters. Two days later we called at the island of Bayram, and on the following day reached the town of Quqa [Gogo, in Kathiawar], a large town with important bazaars. We anchored four miles from shore on account of the low tide, but I went on shore in a small boat with some of my companions. . . . On setting sail from this town we arrived after three days at the island of Sandabúr [Goa], on which there are thirty-six villages. It is surrounded by a gulf, the waters of which are sweet and agreeable at low tide but salt and bitter at high tide. In the centre of the island are two cities, an ancient one built by the infidels, and one built by the Muslims when they first captured the island. We passed by this island and anchored at a smaller one near the mainland. Next day, we reached the

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town of Hinawr [Honaver, Onore], which is on a large inlet navigable for large ships. During the *pushkdl*, which is the rainy season, this bay is so stormy that for four months it is impossible to sail on it except for fishing. The women of this town and all the coastal districts wear nothing but loose unsewn garments, one end of which they gird round their waists, and drape the rest over their head and shoulders. They are beautiful and virtuous, and each wears a gold ring in her nose. One peculiarity amongst them is that they all know the Koran by heart. I saw in the town thirteen schools for girls and twenty-three for boys, a thing which I have never seen elsewhere. Its inhabitants live by maritime commerce, and have no cultivated land. . . . The people of Mulaybár [Malabar] pay a fixed sum annually to Sultan Jalál ad-Dín, through fear of his sea-power. His army is composed of about six thousand men, horse and foot. On another occasion I stayed for eleven months at his court without ever eating bread, for their sole food is rice. I lived also in the Maldivé Islands, Ceylon, and on the Coromandel and Malabar coasts for three years eating nothing but rice, until I could not swallow it except by taking water with it. On this occasion we stayed with the Sultan of Hinawr for three days, he supplied us with provisions, and we left him to continue our journey.

Three days later we reached the land of Mulaybár [Malabar], which is the pepper country. It extends for two months' journey along the coast from Sandabúr [Goa] to Kawlam [Quilon, in Travancore]. The road over the whole distance runs beneath the shade of trees, and at every half-mile there is a wooden shed with benches on which all travellers, whether Muslims or infidels, may sit. At each shed there is a well for drinking and an infidel who is in

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charge of it. If the traveller is an infidel he gives him water in vessels; if he is a Muslim he pours the water into his hands, continuing to do so until he signs to him to stop. It is the custom of the infidels in the Mulaybár lands that no Muslim may enter their houses or eat from their vessels; if he does so they break the vessels or give them to the Muslims. In places where there are no Muslim inhabitants they give him food on banana leaves. At all the halting-places on this road there are houses belonging to Muslims, at which Muslim travellers alight, and where they buy all that they need. Were it not for them no Muslim could travel by it.

On this road, which, as we have said, extends for a two months' march, there is not a foot of ground but is cultivated. Every man has his own orchard, with his house in the middle and a wooden palisade all round it. The road runs through the orchards, and when it comes to a palisade there are wooden steps to go up by and another flight of steps down into the next orchard. No one travels on an animal in that country and only the Sultan possesses horses. The principal vehicle of the inhabitants is a palanquin carried on the shoulders of slaves or hired porters; those who do not travel on palanquins go on foot, be they who they may. Baggage and merchandise is transported by hired carriers, and a single merchant may have a hundred such or thereabouts carrying his goods. I have never seen a safer road than this for they put to death anyone who steals a single nut, and if any fruit falls no one picks it up but the owner. Indeed we sometimes met infidels during the night on this road, and when they saw us they stood aside to let us pass.

Muslims are most highly honoured amongst them, except that, as we have said, they do not eat with them nor allow them into their houses. In the

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Mulaybár lands there are twelve infidel sultans, some of them strong with armies numbering fifty thousand men, and others weak with armies of three thousand. Yet there is no discord whatever between them, and the strong does not desire to seize the possessions of the weak. At the boundary of the territories of each ruler there is a wooden gateway, on which is engraved the name of the ruler whose territories begin at that point. This is called the "Gate of Security" of such-and-such a prince. If any Muslim or infidel criminal flees from the territory of one and reaches the Gate of Security of another, his life is safe, and the prince from whom he has fled cannot seize him, even though he be a powerful prince with a great army. The rulers in these lands transmit their sovereignty to their sisters' sons, to the exclusion of their own children. I have seen this practice nowhere else except among the veiled Massúfa. . . .

We travelled to the city of Qálíqút [Calicut], which is one of the chief ports in Mulaybár and one of the largest harbours in the world. It is visited by men from China, Sumatra, Ceylon, the Maldives, Yemen and Fárs, and in it gather merchants from all quarters. The sultan of Calicut is an infidel, known as "the Samari." He is an aged man and shaves his beard, as some of the Greeks do. In this town too lives the famous shipowner Mithqál, who possesses vast wealth and many ships for his trade with India, China, Yemen and Fárs. When we reached the city, the principal inhabitants and merchants came out to welcome us, with drums, trumpets, bugles and standards on their ships. We entered the harbour in great pomp, the like of which I have never seen in these lands, but it was a joy to be followed by distress. We stopped in the port of Calicut, in which there were at the time thirteen Chinese vessels and disembarked. Everyone of us

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was lodged in a house and we stayed there three months as the guests of the infidel, awaiting the season of the voyage to China. On the Sea of China travelling is done in Chinese ships only, so we shall describe their arrangements.

The Chinese vessels are of three kinds; large ships called *junks*, middle-sized ones called *zaws* [dhows] and small ones called *kakams*. The large ships have anything from twelve down to three sails, which are made of bamboo rods plaited like mats. They are never lowered but turned according to the direction of the wind; at anchor they are left floating in the wind. A ship carries a complement of a thousand men, six hundred of whom are sailors, and four hundred men-at-arms, including archers, men with shields and arbalists, who throw naphtha. Each larger vessel is accompanied by three smaller ones, the "half," the "third," and "the quarter." The vessel has four decks and contains rooms, cabins and saloons for merchants; a cabin has chambers and a lavatory, and can be locked by its occupant who takes along with him slave girls and wives. Often a man will live in his cabin unknown to any of the others on board until they meet on reaching some town. The sailors have their children living on board ship, and they cultivate green stuffs, vegetables and ginger in wooden tanks. The owner's factor on board ship is like a great amir. When he goes on shore he is preceded by archers and Abyssinians with javelins, swords, drums, trumpets and bugles. On reaching the house where he stays they stand their lances on both sides of the door, and continue this during his stay. Some of the Chinese own large numbers of ships on which their factors are sent to foreign countries. There is no people in the world wealthier than the Chinese.

Fifteen days after leaving Sunarkáwán we reached

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the country of the Barahnakár, whose mouths are like those of dogs. This tribe is a rabble, professing neither the religion of the Hindus nor any other. They live in reed huts roofed with grasses on the seashore, and have abundant banana, areca, and betel trees. Their men are shaped like ourselves, except that their mouths are shaped like those of dogs; this is not the case with their womenfolk, however, who are endowed with surpassing beauty. Their men too go unclothed, not even hiding their nakedness, except occasionally for an ornamental pouch of reeds suspended from their waists. The women wear aprons of leaves of trees. With them reside a number of Muslims from Bengal and Sumatra, who occupy a separate quarter. The natives do all their trafficking with the merchants on the shore, and bring them water on elephants, because the water is at some distance from the coast. . . . Elephants are numerous in their land but no one may dispose of them except the sultan, from whom they are bought in exchange for woven stuffs.

Their sultan came to meet us, riding on an elephant, which carried a sort of packsaddle made of skins. He himself was dressed in goatskins with the hair to the outside; on his head there were three coloured bands of silk and he had a reed javelin in his hand. Accompanying were about twenty of his relatives, mounted on elephants. We sent him a present of pepper, ginger, cinnamon, [cured] fish from the Maldivé Islands, and some Bengali cloth. They do not wear the cloth themselves but cover their elephants with it on feast days. This sultan exacts from every ship that puts in at his land a slave girl, a white slave, enough cloth to cover an elephant, and ornaments of gold, which his wife wears on her girdle and her toes. If anyone withholds this tribute, they put a spell on him which raises a storm on sea,

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so that he perishes or all but perishes.

Twenty-five days after leaving these people we reached the island of Jáwa [Sumatra], from which the incense called *jawi* takes its name. We saw the island when we were still half a day's journey from it. It is verdant, and fertile; the commonest trees there are the coco-palm, areca, clove, Indian aloe, jack-tree, mango, jamún, sweet orange and camphor cane. The commerce of its inhabitants is carried on with pieces of tin and native Chinese gold, unsmelted. The majority of the aromatic plants which grow there are found only in the districts occupied by the infidels; in the Muslim districts they are less plentiful. When we reached the harbour its people came out to us in small boats with coconuts, bananas, mangoes and fish. Their custom is to present these to the merchants, who recompense them, each according to his means. . . .

We continued our journey by sea and thirty-four days later came to the sluggish or motionless sea. There is a reddish tinge in its waters, which, they say, is due to soil from a country in the vicinity. There are no winds or waves or movement at all in it, in spite of its wide extent. It is on account of this sea that each Chinese junk is accompanied by three vessels, as we have mentioned, which take it in tow and row it forwards. Besides this every junk has about twenty oars as big as masts, each of which is manned by a muster of thirty men or so, who stand in two ranks facing one another. Attached to the oars are two enormous ropes as thick as cables; one of the ranks pulls on the cable [at its side], then lets go, and the other rank pulls [on the cable at its side]. They chant in musical voices as they do this, most commonly saying *la'-lá, la' la*. We passed thirty-seven days on this sea, and the sailors were surprised at the facility of our crossing, for they [usually]

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spend forty to fifty days on it, and forty days is the shortest time required under the most favourable circumstances.

H. A. R. GIBB, *The Travels of Ibn Battuta*

THE DISCOVERY OF JAPAN

[FERDINAND MENDES PINTO (1509-1583) sailed to India and the East in 1537 and in his famous travel book, the *Peregrination*, tells of his shipwreck off the coast of China, his long years, beginning as a prisoner, in that country, and his later journeys to Japan. His long book is full of interesting descriptions of sixteenth-century China, vividly and skilfully reported. In them he brings to life the advanced civilisation of the eastern world, and so wonderful are many of his accounts that they were long considered fantastic exaggerations. Later travellers and scholars have shown that nearly everything he wrote is correct.

His sea voyage to Japan is of great historical significance, for when he and his companions landed at "the isle of Tanixumaa, which is the first land of Japan," they were the first Europeans to visit the country. Pinto was received with kindness and won the favour of the king by presenting him with an arquebus, a new invention to the Japanese. In a few years the musket had served as a copy for scores of thousands, and Pinto remarks on the military spirit of the Japanese and their skill as craftsmen. Some years later we hear that Pinto, then a very rich man, introduced St. Francis Xavier to Japan as the first Christian missionary.

Mendes Pinto returned to Portugal in 1558 and wrote his *Peregrination* so that his sons might have a

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record of his adventures. Samuel Purchas, a successor to Hakluyt, gave an English account of Pinto in 1625, but a full and excellent translation of the *Peregrination* was made by Henry Cogan in 1653.

Pinto tells us he was one of ninety-five mariners shipwrecked on the islands off the Bay of Hangchow. They were taken prisoner and later transferred for trial from Nanking to Pekin. They made the journey by river, and Pinto describes in detail what he saw on the way. From his conversations he shows that he soon became proficient in the Chinese language.]

We had already sailed seven days in the Gulf of Nanquin, to the end that the force of the current might carry us the more swiftly away, as men whose safety consisted wholly in flight, for we were so desolate and sad that we scarce spake to one another ; in the meantime we arrived at a village called Susequerim, where no news being come either of us or what we had done, we furnished ourselves with some victual, and getting information very covertly of the course we were to hold, we departed within two hours after, and then with the greatest speed we could make we entered into a strait named Xalingau, much less frequented than the gulf that we had passed ; here we navigated nine days more, in which time we ran a hundred and forty leagues, then entering again into the said Gulf of Nanquin, which in that place was not above ten or eleven leagues broad, we sailed for the space of thirteen days from one side to another with a westerly wind, exceedingly afflicted, both with the great labour we were fain to endure, and the cruel fear we were in, besides the want we began to feel of victuals.

In this case being come within sight of the mountains of Coxinacau, which are in the height of

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forty and one degrees, there arose so terrible a south wind, called by the Chinese *tufaon*, as it could not possibly be thought a natural thing, so that our vessels being low-built, weak, and without mariners, we were reduced to such extremity, that out of all hope to escape we suffered ourselves to be driven along the coast, as the current of the water would carry us, for we held it more safe to venture ourselves amongst the rocks, than to let us be swallowed up in the midst of the sea, and though we had chosen this design as the better and less painful, yet did it not succeed, for after dinner the wind turned to the north-west, whereby the waves became so high, that it was most dreadful to behold; our fear then was so extreme, as we began to cast all that we had into the sea, even to the chests full of silver. That done, we cut down our two masts, and so without masts and sails we floated along all the rest of the day; at length about midnight we heard them in António de Faria's vessel cry: "Lord, have mercy upon us," which persuaded us that they were cast away, the apprehension whereof put us in such a fright, as for an hour together no man spake a word.

Having passed all this sad night in so miserable a plight, about an hour before day our vessel opened about the keel, so that it was instantly full of water eight spans high, whereupon perceiving ourselves to sink, we verily believed it was the good pleasure of God that in this place we should finish both our lives and labours. As soon then as it was day we looked out to sea, as far as possibly we could discern, but could no way discover António de Faria, which put us quite out of heart, and so continuing in this great affliction till about ten of the clock, with so much terror and amazement as words are not able to express, at last we ran against the coast, and even drowned as we were, the waves rolled us

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towards a point of rocks that stood out into the sea, where we were no sooner arrived but that all went to pieces, insomuch that of five-and-twenty Portugals, which we were, there were but fourteen saved, the other eleven being drowned together with eighteen Christian servants and seven Chinese mariners. This miserable disaster happened on a Monday, the 5th of August, in the year one thousand five hundred forty and two, for which the Lord be praised everlastingly.

We fourteen Portugals, having escaped out of this shipwreck by the mere mercy of God, spent all that day and the night following, in bewailing our misfortune and the wretched estate whereunto we were reduced, but in the end consulting together, what course to take for to give some remedy thereunto, we concluded to enter into the country, hoping that far or near we should not fail to meet with somebody, that taking us for slaves, would relieve us with meat, till such time as it should please heaven to terminate our travels with the end of our lives. With this resolution we went some six or seven leagues over rocks and hills, and on the other side discovered a great marsh, so large and void, as it passed the reach of our sight, there being no appearance of any land beyond it, which made us turn back again towards the same place where we were cast away. Being arrived there the day after about sunset, we found upon the shore the bodies of our men which the sea had cast up, over whom we recommended our sorrow and lamentations, and the next day we buried them in the sand to keep them from being devoured by the tigers, whereof that country is full, which we performed with much labour and pain, in regard we had no other tools for that purpose but our hands and nails. After these poor bodies were interred we got us into a marsh, where we spent all the night

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as the safest place we could choose to preserve us from the tigers. From thence we continued our journey towards the north, and ~~that~~ by such precipices and thick woods, as we had much ado to pass through them.

Having travelled in this manner three days, at length we arrived at a little strait without meeting anybody, over the which resolving to swim, by ill fortune the four first that entered into it, being three Portugals and a young youth, were miserably drowned, for being very feeble, and the strait somewhat broad, and the current of the water very strong, they were not able to hold out any longer when they came to the midst; so we eleven with three servants that remained, seeing the unfortunate success of our companions, could do nothing but weep and lament, as men that hourly expected such or a worse end. Having spent all that dark night exposed to the wind, cold, and rain, it pleased our Lord that the next morning before day we discovered a great fire towards the east, whereupon as soon as the day broke, we marched fair and softly that way, recommending ourselves to that Almighty God from whom alone we could hope for a remedy to our miseries, and so continuing our journey all along the river the most part of that day, at last we came to a little wood, where we found five men making a fire of coals, whom on our knees we besought for God's sake to direct us to some place where we might get some relief. "I would," said one of them, beholding us with an eye of pity, "it lay in our power to help you, but alas! all the comfort we can give you is to bestow some part of our supper on you, which is a little rice, wherewith you may pass this night here with us if you will, though I hold it better for you to proceed on your way, and recover the place you see a little below, where you shall find a hospital that

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serves to lodge such pilgrims as chance to come into these quarters." Having thanked him for his good address we fell to the rice they gave us, which came but to two mouthfuls apiece, and so took our leaves of them, going directly to the place they had showed us, as well as our weakness would permit.

About an hour within night, we arrived at the hospital, where we met with four men, that had the charge of it, who received us very charitably. The next morning as soon as it was day they demanded of us what we were, and from whence we came. Thereunto we answered that we were strangers, natives of the kingdom of Siam, and that coming from the port of Liampoo to go to the fishing of Nanquin, we were cast away at sea by the violence of a storm, having saved nothing out of this shipwreck but those our miserable and naked bodies. . . .

The city of Nanquin, as I said before, is seated by this river of Batampina, upon a reasonable high hill, so as it commands all the plains about it; the climate thereof is somewhat cold, but very healthy, and it is eight leagues about, which way soever it is considered, three leagues broad, and one long; the houses in it are not above two storeys high, and all built of wood; only those of the mandarins are made of hewed stone, and also environed with walls and ditches, over which are stone bridges, whereon they pass to the gates, that have rich and costly arches, with divers sorts of inventions upon the towers, all which, put together, make a pleasing object to the eye, and represent a certain kind of I know not what majesty. The houses of the *chaems*, *anchacys*, *aytaus*, *tutons*, and *chumbims*, which are all governors of provinces or kingdoms, have stately towers, six or seven storeys high, and gilt all over, wherein they have their magazines for arms, their wardrobes, their treasuries, and a world of rich household stuff, as also many other

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things of great value, together with an infinite of delicate and most fine porcelain, which amongst them is prized and esteemed as much as precious stone, for this sort of porcelain never goes out of the kingdom, it being expressly forbidden by the laws of the country to be sold, upon pain of death, to any stranger, unless to the *xatamaas*, that is, the sophies of the Persians, who by a particular permission buy of it at a very dear rate.

The Chinese assured us that in this city there are eight hundred thousand fires, fourscore thousand mandarins' houses, threescore and two great market-places, a hundred and thirty butchers' shambles, each of them containing fourscore shops, and eight thousand streets, whereof six hundred that are fairer and larger than the rest are compassed about with balusters of copper; we were further assured that there are likewise two thousand and three hundred pagodas, a thousand of which were monasteries of religious persons, professed in their accursed sect, whose buildings were exceeding rich and sumptuous, with very high steeples, wherein there were between sixty and seventy such mighty huge bells, that it was a dreadful thing to hear them rung. There are moreover in the city thirty great strong prisons, each whereof hath three or four thousand prisoners; and a charitable hospital, expressly established to supply the necessities of the poor, with proctors ordained for their defence, both in civil and criminal causes, as is before related. At the entrance into every principal street, there are arches and great gates, which for each man's security are shut every night, and in most of the streets are goodly fountains whose water is excellent to drink. Besides, at every full and new moon, open fairs are kept in several places, whither merchants resort from all parts, and where there is such abundance of all kind of victuals as

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cannot well be expressed, especially of flesh and fruit. It is not possible to deliver the great store of fish that is taken in this river, chiefly soles and mullets, which are all sold alive, besides a world of sea-fish, both fresh, salted, and dried; we were told by certain Chinese that in this city there are ten thousand trades for the working of silks, which from thence are sent all over the kingdom.

The city itself is environed with a very strong wall, made of fair hewed stone. The gates of it are a hundred and thirty, at each of which there is a porter and two halberdiers, who are bound to give an account every day of all that passes in and out; there are also twelve forts or citadels, like unto ours, with bulwarks and very high towers, but without any ordnance at all. The same Chinese also affirmed unto us that the city yielded the king daily two thousand taels of silver, which amount to three thousand ducats, as I have delivered heretofore. I will not speak of the palace royal, because I saw it but on the outside; howbeit the Chinese tell such wonders of it as would amaze a man, for it is my intent to relate nothing save what we beheld here with our own eyes, and that was so much as I am afraid to write it, not that it would seem strange to those that have seen and read the marvels of the kingdom of China, but because I doubt that they which would compare those wondrous things that are in the countries they have not seen with that little they have seen in their own, will make some question of it, or, it may be, give no credit at all to these truths, because they are not conformable to their understanding and small experience. . . . I will show you that one of the principal causes why this monarchy of China, that contains two-and-thirty kingdoms, is so mighty, rich, and of so great commerce, is, because it is exceedingly replenished with

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ivers, and a world of canals that have been anciently made by the kings, great lords, and people thereof, for to render all the country navigable, and so communicate their labours with one another. The narrowest of these canals have bridges of hewed stone over them, that are very high, long, and broad, whereof some are of one stone, eighty, ninety, nay, a hundred spans long, and fifteen or twenty broad, which doubtless is very marvellous, for it is almost impossible to comprehend by what means so huge a mass of stone could be drawn out of the quarry without breaking, and how it should be transported to the place where it was to be set. All the ways and passages, from cities, towns, and villages, have very large causeways made of fair stone, at the ends whereof are costly pillars and arches, upon which are inscriptions with letters of gold, containing the praises of them that erected them; moreover there are handsome seats placed all along for poor passengers to rest themselves on. There are likewise innumerable aqueducts and fountains everywhere, whose water is most wholesome and excellent to drink. . . .

By these marvels which are found in the particular towns of this empire, may be concluded what the greatness thereof might be were they joined all together; but for the better satisfaction of the reader, I dare boldly say, if my testimony may be worthy of credit, that in one-and-twenty years' space, during which time, with a world of misfortune, labour, and pain, I traversed the greatest part of Asia, as may appear by this my discourse, I had seen in some countries a wonderful abundance of several sorts of victuals and provisions which we have not in our Europe, yet without speaking what each of them might have in particular, I do not think there is in all Europe so much as there is in China alone. And the same may be said of all the rest, wherewith

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heaven hath favoured this climate, as well for the temperature of the air, as for that which concerns the policy and ~~riches~~, the magnificence and greatness of their estate. Now that which gives the greatest lustre unto it is their exact observation of justice, for there is so well ruled a government in this country, as it may justly be envied of all others in the world. And to speak the truth, such as want this particular have no gloss, be they otherwise never so great and commendable. Verily, so often as I represent unto myself those great things which I have seen in this China, I am on the one side amazed to think how liberally it hath pleased God to heap upon this people the goods of the earth, and on the other side I am exceedingly grieved to consider how ungrateful they are in acknowledging such extraordinary favours.

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We continued our voyage with a good wind all along the coast of Lamau for the space of nine days until that one morning when we were near to the river of salt, which is about five leagues from Chaba-queue, it was our ill fortune to be assailed by a pirate, who with seven great junks fell to fighting with us from six in the morning till ten of the clock before noon, in which conflict we were so entertained with shot, and pots full of artificial fire, that at last there were three sail burnt, to wit, two of the pirate's and one of ours, which was the junk wherein the five Portugals were, whom we could by no means succour, for that then most of our men were hurt. But at length towards night, being well refreshed by the afternoon's gale, it pleased our Lord that we escaped out of this pirate's hands. In this ill equipage wherein we were we continued our course for three days together, at the end whereof we were environed by so great and impetuous a tempest that the same

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night in which it seized us we lost the coast, and because the violence of the storm would never suffer us after to recover it again we were forced to make with full sail towards the islands of the Lequios, where the pirate, with whom we went, was well known, both to the king and those of the country; with this resolution we set ourselves to sail through the archipelago of these islands, where notwithstanding we could not make land, as well for that we wanted a pilot to steer the vessel, ours being slain in the last fight, as also because the wind and tide was against us.

Amidst so many crosses we beat up and down with labour enough from one rhumb to another for three-and-twenty days together, at the end whereof it pleased God that we discovered land, whereunto approaching to see if we could descry any appearance of a port or good anchorage, we perceived on the south coast near to the horizon of the sea a great fire, which persuaded us that there we might peradventure find some borough, where we might furnish ourselves with fresh water, whereof we had very great need. So we went and rode just before the island in seventy fathom, and presently we beheld two *almadias* come towards us from the land with six men in them, who being come close to the side of our junk, and having complimented with us according to their manner, demanded of us from whence we came; whereunto having answered that we came from China with merchandise, intending to trade in this place if we might be suffered, one of the six replied that the *nautaquim*, lord of that island, called Tanixumaa, would very willingly permit it upon payment of such customs as are usual in Japan, "which is," continued he, "this great country that you see here before you." At these news, and many other things which they told us, we were exceedingly glad, so that after they had showed us the port, we

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weighed anchor, and went and put ourselves under the lee shore of a creek, which was on the south side, and where stood a great town named Miay-gimaa, from whence there came instantly aboard of us divers *paraos* with refreshments, which we bought.

We had not been two hours in this creek of Miay-gimaa, whenas the *nautaquim*, prince of this island of Tanixumaa, came directly to our junk, attended by divers gentlemen and merchants, who had brought with them many chests full of silver ingots, therewith to barter for our commodities; so after ordinary compliments passed on either side, and that we had given our word for his easiest coming aboard of us, he no sooner perceived us three Portugals, but he demanded what people we were, saying, that by our beards and faces we could not be Chinese. Hereunto the pirate answered that we were of a country called Malaca, whither many years before we were come from another land named Portugal, which was at the further end of the world. At these words the *nautaquim* remained much amazed, and turning himself to his followers, "Let me not live," said he unto them, "if these men here be not the Chenchicogims, of whom it is written in our books that flying on the top of the waters they shall from thence subdue the inhabitants of the earth, where God hath created the riches of the world, wherefore it will be a good fortune for us if they come into our country as good friends." Thereupon having called a woman of Lequia, whom he had brought to serve as an interpreter between him and the Chinese captain of the junk: "Ask the *necoda*," said he unto her, "where he met with these men, and upon what occasion he hath brought them hither with him unto our country of Japan." The captain thereunto replied that we were honest men and merchants, and that having found us at Lampacau, where we had been cast

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away, he had out of charity taken us in, as he used to do unto all such as he met withal in the like case, to the end that God might out of His gracious goodness be thereby moved to deliver him from the danger of such violent tempests as commonly they that sail on the sea are subject to perish in.

This saying of the pirate seemed so reasonable to the *nautaquim*, that he presently came aboard of us, and because those of his train were very many, he commanded that none but such as he named should enter in. After he had seen all the commodities in the junk he sat him down in a chair upon the deck, and began to question us about certain things which he desired to know, to the which we answered him in such sort as we thought would be most agreeable to his humour, so that he seemed to be exceedingly satisfied therewith. In this manner he entertained us a good while together, making it apparent by his demands that he was a man very curious, and much inclined to hear of novelties and rare things. That done, he took his leave of us and the *necoda*, little regarding the rest, saying: "Come and see me at my house to-morrow, and for a present bring me an ample relation of the strange things of that great world through which you have travelled, as also of the countries that you have seen, and withal remember to tell me how they are called, for I swear unto you that I would far more willingly buy this commodity than any that you can sell me."

This said, he returned to land, and the next morning as soon as it was day he sent us to our junk a great *paraoo*, full of divers sorts of refreshments, as raisins, pears, melons, and other kinds of fruits of that country. In exchange of this present the *necoda* returned him by the same messenger divers rich pieces of stuff, together with certain knacks and rarities of China, and withal sent him word, that as

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✧ soon as his junk should be at anchor and out of danger of the weather, he would come and wait on him ashore, and bring him some patterns of the commodities which we had to sell; as indeed the next morning he went on land, and carried us three along with him, as also some ten or eleven of the chiefest of the Chinese of his company, to the end that at this first sight he might settle a good opinion of himself in this people for the better satisfaction of that vanity whereunto they are naturally inclined: we went then to the *nautaquim's* house, where we were very well entertained, and the *necoda*, having given him a rich present, showed him the patterns of all the commodities he had, wherewith he rested so contented, that he sent presently for the principal merchants of the place, with whom the *necoda* having agreed upon a price for his commodities, it was resolved that the next day they should be transported from the junk unto a certain house, which was appointed for the *necoda* and his people to remain in till such time as he should set sail for China.

After all this was concluded the *nautaquim* fell again to questioning of us about many several matters, whereunto we rendered him such answers as might rather fit his humour than agree with the truth indeed, which yet we did not observe but in some certain demands that he made us, where we thought it necessary to make use of certain particulars altogether feigned by us, that so we might not derogate from the great opinion he had conceived of our country. The first thing he propounded was, how he had learned from the Chinese and Lequios that Portugal was far richer, and of a larger extent, than the whole empire of China, which we confirmed unto him. The second, how he had likewise been assured, that our king had upon the sea conquered the greatest part of the world, which also we averred to

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be so ; the third, that our king was so rich in gold and silver, as it was held for most certain that he had above two thousand houses full of it even to the very tops ; but thereunto we answered that we could not truly say the number of the houses because the kingdom of Portugal was so spacious, so abounding with treasure, and so populous, as it was impossible to specify the same. So after the *nautequim* had entertained us above two hours with this and the like discourse, he turned him to those of his train and said : “ Assuredly not one of those kings, which at this present we know to be on the earth, is to be esteemed happy, if he be not the vassal of so great a monarch as the emperor of this people here.” Whereupon having dismissed the *necoda* and his company, he entreated us to pass that night on shore with him, for to satisfy the extreme desire that he had to be informed from us of many things of the world, whereunto he was exceedingly carried by his own inclination ; withal he told us that the next day he would assign us a lodging next to his own palace, which was in the most commodious place of the town, and for that instant he sent us to lie at a very rich merchant’s house, who entertained us very bountifully that night.

The next day the Chinese *necoda* disembarked all his commodities, as the *nautaquim* had enjoined him, and put them into sure rooms which were given him for that purpose, and in three days he sold them all, as well for that he had not many, as because his good fortune was such that the country was at that time utterly unfurnished thereof, by which means this pirate profited so much, that by this sale he wholly recovered himself of the loss of the six-and-twenty sail which the Chinese pirate had taken from him ; for they gave him arly price he demanded,

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so that he confessed unto us that of the value of some five-and-twenty hundred taels which he might have in goods, he made above thirty thousand.

Now as for us three Portugals, having nothing to sell, we employed our time either in fishing, hunting, or seeing the temples of these gentiles, which were very sumptuous and rich, whereunto the bonzes who are their priests received us very courteously, for indeed, it is the custom of those of Japan to be exceeding kind and courteous. Thus we having little to do, one of us, called Diogo Zeimoto, went many times a-shooting for his pleasure in a harquebus that he had, wherein he was very expert, so that going one day by chance to a certain marsh, where there was great store of fowl, he killed at that time about six-and-twenty wild ducks. In the meantime these people beholding this manner of shooting, which they had never seen before, were much amazed at it, insomuch that it came to the notice of the *nautaquim*, who was at that instant riding of horses, and not knowing what to think of this novelty, sent presently for Zeimoto, just as he was shooting in the marsh, but when he saw him come with his harquebus on his shoulder and two Chinese with him carrying the fowl, he was so mightily taken with the matter & he could not sufficiently admire it; for whereas they had never seen any gun before in that country, they could not comprehend what it might be, so that for want of understanding the secret of the powder, they all concluded that of necessity it must be some sorcery; thereupon Zeimoto seeing them so astonished, and the *nautaquim* so contented, made three shoots before them, whereof the effect was such that he killed one kite and two turtle-doves; in a word then, and not to lose time by endearing the matter with much speech, I will say no more, but that the *nautaquim* caused Zeimoto to get up on the

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horse's crupper behind him and so accompanied with a great crowd of people, and four ushers, who with battoons headed with iron went before him crying all along the streets: "Know all men that the *nautaquim*, prince of this island of Tanixumaa, and lord of our heads, enjoins and expressly commands, that all persons whatsoever, which inhabit the land that lies between the two seas, do honour this *chen-chicogin*, of the further end of the world, for even at this present and for hereafter he makes him his kinsman, in such manner as the *facharons* are, who sit next his person; and whosoever shall not do so willingly, he shall be sure to lose his head." Whereunto all the people, answered with a great noise: "We will do so for ever."

In this pomp Zeimoto being come to the palace gate, the *nautaquim* alighted from his horse, and taking him by the hand, whilst we two followed on foot a pretty way after, he led him into his court, where he made him sit with him at his own table, and to honour him the more, he would needs have him lodge there that night, showing many other favours to him afterwards, and to us also for his sake. Now Zeimoto conceiving that he could not better acknowledge the honour which the *nautaquim* did him, than by giving him his harquebus, which he thought would be a most acceptable present unto him on a day when he came home from shooting, he tendered it unto him with a number of pigeons and turtle-doves, which he received very kindly, as a thing of great value, assuring him that he esteemed of it more than of all the treasures of China, and giving him withal in recompense thereof a thousand taels in silver, he desired him to teach him how to make the powder, saying that without that the harquebus would be of no use to him, as being but a piece of unprofitable iron, which Zeimoto promised

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him to do, and accordingly performed the same.

Now the *nautiquim* taking pleasure in nothing so much as shooting in this harquebus, and his subjects perceiving that they could not content him better in anything than in this wherewith he was so much delighted, they took a pattern of the said harquebus to make others by it, and the effect thereof was such, that before our departure (which was five months and a half later) there was six hundred of them made in the country; nay, I will say more, that afterward, namely the last time that the viceroy Dom Afonso de Noronha sent me thither with a present to the king of Bungo, which happened in the year 1556, those of Japan affirmed, that in the city of Fuchco, being the chief of that kingdom, there were alone thirty thousand; whereat finding myself to be much amazed, for that it seemed impossible unto me that this invention should multiply in such sort, certain merchants of good credit assured me, that in the whole island of Japan there were above three hundred thousand harquebuses, and that they alone had transported of them in the way of trade to the country of the Lequios, at six several times, to the number of five-and-twenty hundred; so that by the means of that one, which Zeimoto presented to the *nautiquim* in acknowledgment of the honour and good offices that he had done him, as I have declared before, the country was filled with such abundance of them, as at this day there is not so small a hamlet but hath a hundred at the least; for as for cities and great towns, they have them by thousands, whereby one may perceive what the inclination of this people is, and how much they are naturally addicted to the wars, wherein they take more delight than any other nation that we know.

*The Voyages and Adventures of Fernand Mendes
Pinho* (trans. H. Cogan)

VOYAGES OF DISCOVERY AND
ENDURANCE

COLUMBUS DISCOVERS AMERICA

[CHRISTOPHER COLUMBUS (1446-1506), a Genoese, lived in Portugal for many years and later in Madeira, "where news of fresh discoveries was constantly arriving." He had a good knowledge of the art of navigation and, in Portugal, is said to have earned his living for some time by drawing maps and charts. He believed that the earth was round and was convinced he could reach India by sailing west from the Azores in the Atlantic. From sailors in these islands he learnt of strange drift-wood, large cones, and pines floating from the west—such things still drift across the Atlantic in the Gulf Stream.

When Columbus asked the King of Portugal for assistance to fit out an expedition it was refused. So he turned to Spain and eventually the Queen decided to provide him with a fleet of three vessels—the *Santa Maria* of about 100 tons, *La Pinta* of 50 tons, and *La Niña* of 40 tons. They set sail on August 3, 1492. On board were 120 men, including an interpreter who spoke Hebrew, Greek, and Arabic; it was hoped he might prove useful when they met the Grand Khan.

Columbus, so as not to alarm his crew, announced to them a figure below the real number of miles sailed each day. But the crew grew anxious when, after many days, no sign of land appeared. They sailed into masses of seaweed (the Sargasso Sea) and Columbus had more difficulty in getting rid of their fears. The Trade Wind had blown them steadily

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westwards for more than three weeks and the men began to wonder how they would return. After another week they were almost ready to mutiny. But Columbus begged them to have a little more patience and on October 4th he is able to record in his diary: "The sailors of the *Pinta* saw a reed and a stick and they picked up another small bit of wood, carved apparently with an iron tool, a piece of cane and a small board. The sailors of the *Niña* also saw some signs of land and a small piece of wood covered with dog-roses. At these signs they drew in their breath and were full of gladness."

The Spaniards landed on an island which the Indians called Guanahani, probably Watling Island in the Bahamas; while the natives looked on in amazement, Columbus and his men fell on their knees and offered their "immense thanksgiving to Almighty God."]

On the 14th of September, the voyagers were rejoiced by the sight of what they considered harbingers of land. A heron, and a tropical bird called the Rabo de Junco, neither of which are supposed to venture far to sea, hovered about the ships. On the following night they were struck with awe at beholding a meteor, or, as Columbus calls it in his journal, a great flame of fire, which seemed to fall from the sky into the sea, about four or five leagues distant. These meteors, common in warm climates, and especially under the tropics, are always seen in the serene azure sky of those latitudes, falling as it were from the heavens; but never beneath a cloud. In the transparent atmosphere of one of those beautiful nights, where every star shines with the purest lustre, they often leave a luminous train behind them which lasts for twelve or fifteen seconds, and may well be compared to a flame.

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The wind had hitherto been favourable, with occasional though transient clouds and showers. They had made great progress each day, though Columbus, according to his secret plan, contrived to suppress several leagues in the daily reckoning left open to the crew.

They had now arrived within the influence of the trade wind, which, following the sun, blows steadily from east to west between the tropics, and sweeps over a few adjoining degrees of ocean. With this propitious breeze directly aft, they were wafted gently but speedily over a tranquil sea, so that for many days they did not shift a sail. Columbus perpetually recurs to the bland and temperate serenity of the weather, which in this tract of the ocean is soft and refreshing without being cool. In his artless and expressive language he compares the pure and balmy mornings to those of April in Andalusia, and observes that they wanted but the song of the nightingale to complete the illusion. "He had reason to say so," observes the venerable Las Casas; "for it is marvellous the suavity which we experience when half way towards these Indies; and the more the ships approach the lands, so much more do they perceive the temperance and softness of the air, the clearness of the sky, and the amenity and fragrance sent forth from the groves and forests; much more certainly than in April in Andalusia."

They now began to see large patches of herbs and weeds drifting from the west, and increasing in quantity as they advanced. Some of these weeds were such as grow about rocks, others such as are produced in rivers; some were yellow and withered, others so green as to have apparently been recently washed from land. On one of these patches was a live crab, which Columbus carefully preserved. They saw also a white tropical bird, of a kind which never

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sleeps upon the sea. Tunny fish also played about the ships, one of which was killed by the crew of the *Niña*. Columbus now called to mind the account given by Aristotle of certain ships of Cadiz, which, coasting the shores outside of the straits of Gibraltar, were driven westward by an impetuous east wind, until they reached a part of the ocean covered with vast fields of weeds, resembling sunken islands, among which they beheld many tunny fish. He supposed himself arrived in this weedy sea, as it had been called, from which the ancient mariners had turned back in dismay, but which he regarded with animated hope, as indicating the vicinity of land. Not that he had yet any idea of reaching the object of his search, the eastern end of Asia; for, according to his computation, he had come but three hundred and sixty leagues since leaving the Canary islands, and he placed the main land of India much farther on.

On the 18th of September the same weather continued; a soft steady breeze from the east filled every sail, while, to use the words of Columbus, the sea was as calm as the Guadalquiver at Seville. He fancied that the water of the sea grew fresher as he advanced, and noticed this as a proof of the superior sweetness and purity of the air.

The crews were all in high spirits; each ship strove to get in the advance, and every seaman was eagerly on the look-out; for the sovereigns had promised a pension of ten thousand maravadis to him who should first discover land. Martin Alonzo Pinzon crowded all canvas, and, as the *Pinta* was a fast sailer, he generally kept the lead. In the afternoon he hailed the admiral and informed him, that, from the flight of a great number of birds, and from the appearance of the northern horizon, he thought there was land in that direction.

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There was in fact a cloudiness in the north, such as often hangs over land ; and at sunset it assumed such shapes and masses that many fancied they beheld islands. There was a universal wish, therefore, to steer for that quarter. Columbus, however, was persuaded that they were mere illusions. Every one who has made a sea voyage must have witnessed the deceptions caused by clouds resting upon the horizon, especially about sunset and sunrise ; which the eye, assisted by the imagination and desire, easily converts into the wished-for land. This is particularly the case within the tropics, where the clouds at sunset assume the most singular appearances.

On the following day there were drizzling showers, unaccompanied by wind, which Columbus considered favourable signs ; two boobies also flew on board the ships, birds which, he observed, seldom fly twenty leagues from land. He sounded, therefore, with a line of two hundred fathoms, but found no bottom. He supposed he might be passing between islands, lying to the north and south ; but was unwilling to waste the present favouring breeze by going in search of them ; beside, he had confidently affirmed that land was to be found by keeping steadfastly to the west ; his whole expedition had been founded on such a presumption ; he should, therefore, risk all credit and authority with his people were he to appear to doubt and waver, and to go groping blindly from point to point of the compass. He resolved, therefore, to keep one bold course always westward, until he should reach the coast of India ; and afterwards, if advisable, to seek these islands on his return.

Notwithstanding his precaution to keep the people ignorant of the distance they had sailed, they were now growing extremely uneasy at the length of the

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voyage. They had advanced much farther west than ever man had sailed before, and though already beyond the reach of succour, still they continued daily leaving vast tracts of ocean behind them, and pressing onward and onward into that apparently boundless abyss. It is true they had been flattered by various indications of land, and still others were occurring; but all mocked them with vain hopes; after being hailed with a transient joy, they passed away, one after another, and the same interminable expanse of sea and sky continued to extend before them. . . .

Columbus endeavoured to dispel these gloomy presages, sometimes by argument and expostulation, sometimes by awakening fresh hopes, and pointing out new signs of land. On the 20th of September the wind veered, with light breezes from the south-west. These, though adverse to their progress, had a cheering effect upon the people, as they proved that the wind did not always prevail from the east. Several birds also visited the ships; three, of a small kind, which keep about groves and orchards, came singing in the morning, and flew away again in the evening. Their song cheered the hearts of the dismayed mariners, who hailed it as the voice of land. The larger fowl, they observed, were strong of wing, and might venture far to sea; but such small birds were too feeble to fly far, and their singing showed that they were not exhausted by their flight.

On the following day there was either a profound calm, or light winds from the south-west. The sea, as far as the eye could reach, was covered with weeds; a phenomenon, often observed in this part of the ocean, which has sometimes the appearance of a vast inundated meadow. This has been attributed to immense quantities of submarine plants, which grow

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at the bottom of the sea until ripe, when they are detached by the motion of the waves and currents, and rise to the surface. These fields of weeds were at first regarded with great satisfaction, but at length they became, in many places, so dense and matted, as in some degree to impede the sailing of the ships, which must have been under very little headway. The crews now called to mind some tale about the frozen ocean, where ships were said to be sometimes fixed immovable. They endeavoured, therefore, to avoid as much as possible these floating masses, lest some disaster of the kind might happen to themselves. . . .

For three days there was a continuance of light summer airs from the southward and westward, and the sea was as smooth as a mirror. A whale was seen heaving up its huge form at a distance, which Columbus immediately pointed out as a favourable indication, affirming that these fish were generally in the neighbourhood of land. The crews, however, became uneasy at the calmness of the weather. They observed that the contrary winds which they experienced were transient and unsteady, and so light as not to ruffle the surface of the sea, which maintained a sluggish calm like a lake of dead water. Every thing differed, they said, in these strange regions from the world to which they had been accustomed. The only winds which prevailed with any constancy and force were from the east, and they had not power to disturb the torpid stillness of the ocean; there was a risk, therefore, either of perishing amidst stagnant and shoreless waters, or of being prevented, by contrary winds, from ever returning to their native country.

Columbus continued with admirable patience to reason with these fancies; observing that the calmness of the sea must undoubtedly be caused by the

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vicinity of land in the quarter whence the wind blew, which, therefore, had not space sufficient to act upon the surface, and heave up large waves. Terror, however, multiplies and varies the forms of ideal danger, a thousand times faster than the most active wisdom can dispel them. The more Columbus argued, the more boisterous became the murmurs of his crew, until, on Sunday, the 25th of September, there came on a heavy swell of the sea, unaccompanied by wind. This phenomenon often occurs in the broad ocean; being either the expiring undulations of some past gale, or the movement given to the sea by some distant current of wind; it was, nevertheless, regarded with astonishment by the mariners, and dispelled the imaginary terrors occasioned by the calm.

Columbus, who as usual considered himself under the immediate eye and guardianship of heaven in this solemn enterprise, intimates in his journal that this swelling of the sea seemed providentially ordered to allay the rising clamours of his crews; comparing it to that which so miraculously aided Moses when conducting the children of Israel out of the captivity of Egypt.

The situation of Columbus was daily becoming more and more critical. In proportion as he approached the regions where he expected to find land, the impatience of his crews augmented. The favourable signs which increased his confidence, were derided by them as delusive; and there was danger of their rebelling, and obliging him to turn back, when on the point of realizing the object of all his labours. They beheld themselves with dismay still wafted onward, over the boundless wastes of what appeared to them a mere watery desert, surrounding the habitable world. What was to become of them

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should their provisions fail? Their ships were too weak and defective even for the great voyage they had already made, but if they were still to press forward, adding at every moment to the immense expanse behind them, how should they ever be able to return, having no intervening port where they might victual and refit.

In this way they fed each other's discontents, gathering together in little knots, and fomenting a spirit of mutinous opposition: and when we consider the natural fire of the Spanish temperament and its impatience of control; and that a great part of these men were sailing on compulsion; we cannot wonder that there was imminent danger of their breaking forth into open rebellion and compelling Columbus to turn back. In their secret conferences they exclaimed against him as a desperado, bent in a mad phantasy, upon doing something extravagant to render himself notorious. What were their sufferings and dangers to one evidently content to sacrifice his own life for the chance of distinction? What obligations bound them to continue on with him: or when were the terms of their agreement to be considered as fulfilled? They had already penetrated unknown seas, untraversed by a sail, far beyond where man had ever before ventured. They had done enough to gain themselves a character for courage and hardihood in undertaking such an enterprise and persisting in it so far. How much further were they to go in quest of a merely conjectured land? Were they to sail on until they perished, or until all return became impossible? In such case they would be the authors of their own destruction.

On the other hand, should they consult their safety, and return back before too late, who would blame them? Any complaints made by Columbus

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would be of no weight ; he was a foreigner, without friends or influence ; his schemes had been condemned by the learned, and discountenanced by people of all ranks. He had no party to uphold him, and a host of opponents whose pride of opinion would be gratified by his failure. Or, as an effectual means of preventing his complaints, they might throw him into the sea, and give out that he had fallen overboard while busy with his instruments contemplating the stars ; a report which no one would have either the inclination or the means to controvert.

Columbus was not ignorant of the mutinous disposition of his crew, but he still maintained a serene and steady countenance ; soothing some with gentle words ; endeavouring to stimulate the pride or avarice of others, and openly menacing the refractory with signal punishment, should they do any thing to impede the voyage.

On the 25th of September, the wind again became favourable, and they were able to resume their course directly to the west. The airs being light, and the sea calm, the vessels sailed near to each other, and Columbus had much conversation with Martin Alonzo Pinzon on the subject of a chart, which the former had sent three days before on board of the *Pinta*. Pinzon thought that, according to the indications of the map, they ought to be in the neighbourhood of Cipango, and the other islands which the admiral had therein delineated. Columbus partly entertained the same idea, but thought it possible that the ships might have been borne out of their track by the prevalent currents, or that they had not come so far as the pilots had reckoned. He desired that the chart might be returned, and Pinzon tying it to the end of a cord, flung it on board to him. While Columbus, his pilot, and several of his experienced mariners were studying the map, and

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endeavouring to make out from it their actual position, they heard a shout from the *Pinta*, and looking up, beheld Martin Alonzo Pinzon mounted on the stern of his vessel, crying, "Land! land! Señor, I claim my reward!" He pointed at the same time to the south-west, where there was indeed an appearance of land at about twenty-five leagues' distance. Upon this Columbus threw himself on his knees and returned thanks to God; and Martin Alonzo repeated the *Gloria in excelsis*, in which he was joined by his own crew and that of the admiral.

The seamen now mounted to the mast-head or climbed about the rigging, straining their eyes in the direction pointed out. The conviction became so general of land in that quarter, and the joy of the people so ungovernable, that Columbus found it necessary to vary from his usual course, and stand all night to the south-west. The morning light, however, put an end to all their hopes, as to a dream. The fancied land proved to be nothing but an evening cloud, and had vanished in the night. With dejected hearts they once more resumed their western course, from which Columbus would never have varied, but in compliance with their clamorous wishes.

For several days they continued on with the same propitious breeze, tranquil sea, and mild, delightful weather. The water was so calm that the sailors amused themselves with swimming about the vessel. Dolphins began to abound, and flying fish, darting into the air, fell upon the decks. The continued signs of land diverted the attention of the crews, and insensibly beguiled them onward.

On the 1st of October, according to the reckoning of the pilot of the admiral's ship, they had come five hundred and eighty leagues west since leaving the Canary islands. The reckoning which Columbus

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showed the crew was five hundred and eighty-four, but the reckoning which he kept privately, was seven hundred and seven. On the following day, the weeds floated from east to west; and on the third day no birds were to be seen.

The crews now began to fear that they had passed between islands, from one to the other of which the birds had been flying. Columbus had also some doubts of the kind, but refused to alter his westward course. The people again uttered murmurs and menaces; but on the following day they were visited by such flights of birds, and the various indications of land became so numerous, that from a state of despondency they passed to one of confident expectation.

Eager to obtain the promised pension, the seamen were continually giving the cry of land, on the least appearance of the kind. To put a stop to these false alarms, which produced continual disappointments, Columbus declared that should any one give such notice, and land not be discovered within three days afterwards, he should thenceforth forfeit all claims to the reward.

On the evening of the 6th of October, Martin Alonzo Pinzon began to lose confidence in their present course, and proposed that they should stand more to the southward. Columbus, however, still persisted in steering directly west. Observing this difference in opinion in a person so important in his squadron as Pinzon, and fearing that chance or design might scatter the ships, he ordered that, should either of the caravels be separated from him, it should stand to the west, and endeavour as soon as possible to join company again: he directed, also, that the vessels should keep near to him at sunrise and sunset, as at these times the state of the atmosphere is most favourable to the discovery of distant land.

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On the morning of the 7th of October, at sunrise, several of the admiral's crew thought they beheld land in the west, but so indistinctly that no one ventured to proclaim it, lest he should be mistaken, and forfeit all chance of the reward: the *Niña*, however, being a good sailer, pressed forward to ascertain the fact. In a little while a flag was hoisted at her mast-head, and a gun discharged, being the preconcerted signals for land. New joy was awakened throughout the little squadron, and every eye was turned to the west. As they advanced, however, their cloud-built hopes faded away, and before evening the fancied land had again melted into air.

The crews now sank into a degree of dejection proportioned to their recent excitement; but new circumstances occurred to arouse them. Columbus, having observed great flights of small field-birds going towards the south-west, concluded they must be secure of some neighbouring land, where they would find food and a resting-place. He knew the importance which the Portuguese voyagers attached to the flight of birds, by following which they had discovered most of their islands. He had now come seven hundred and fifty leagues, the distance at which he had computed to find the island of Cipango; as there was no appearance of it, he might have missed it through some mistake in the latitude. He determined, therefore, on the evening of the 7th of October, to alter his course to the west-south-west, the direction in which the birds generally flew, and continue that direction for at least two days. After all, it was no great deviation from his main course, and would meet the wishes of the Pinzons, as well as be inspiring to his followers generally.

For three days they stood in this direction, and the further they went the more frequent and encouraging were the signs of land. Flights of small birds

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of various colours, some of them such as sing in the fields, came flying about the ships, and then continued towards the south-west, and others were heard also flying by in the night. Tunny fish played about the smooth sea, and a heron, a pelican, and a duck, were seen, all bound in the same direction. The herbage which floated by was fresh and green, as if recently from land, and the air, Columbus observes, was sweet and fragrant as April breezes in Seville.

All these, however, were regarded by the crews as so many delusions beguiling them on to destruction; and when on the evening of the third day they beheld the sun go down upon a shoreless horizon, they broke forth into turbulent clamour. They exclaimed against this obstinacy in tempting fate by continuing on into a boundless sea. They insisted upon turning homeward, and abandoning the voyage as hopeless. Columbus endeavoured to pacify them by gentle words and promises of large rewards; but finding that they only increased in clamour, he assumed a decided tone. He told them it was useless to murmur, the expedition had been sent by the sovereigns to seek the Indies, and, happen what might, he was determined to persevere, until, by the blessing of God, he should accomplish the enterprise.

Columbus was now at open defiance with his crew, and his situation became desperate. Fortunately the manifestations of the vicinity of land were such on the following day as no longer to admit a doubt. Beside a quantity of fresh weeds, such as grow in rivers, they saw a green fish of a kind which keeps about rocks; then a branch of thorn with berries on it, and recently separated from the tree, floated by them; then they picked up a reed, a small board, and above all, a staff artificially carved. All gloom and mutiny now gave way to sanguine expectation;

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and throughout the day each one was eagerly on the watch, in hopes of being the first to discover the long-sought-for land.

In the evening, when, according to invariable custom on board of the admiral's ship, the mariners had sung the *salve regina*, or vesper hymn to the Virgin, he made an impressive address to his crew. He pointed out the goodness of God in thus conducting them by soft and favouring breezes across a tranquil ocean, cheering their hopes continually with fresh signs, increasing as their fears augmented, and thus leading and guiding them to a promised land. He now reminded them of the orders he had given on leaving the Canaries, that, after sailing westward seven hundred leagues, they should not make sail after midnight. Present appearances authorized such a precaution. He thought it probable they would make land that very night; he ordered, therefore, a vigilant look-out to be kept from the fore-castle, promising to whomsoever should make the discovery, a doublet of velvet, in addition to the pension to be given by the sovereigns.

The breeze had been fresh all day, with more sea than usual, and they had made great progress. At sunset they had stood again to the west, and were ploughing the waves at a rapid rate, the *Pinta* keeping the lead, from her superior sailing. The greatest animation prevailed throughout the ships; not an eye was closed that night. As the evening darkened, Columbus took his station on the top of the castle or cabin on the high poop of his vessel, ranging his eye along the dusky horizon, and maintaining an intense and unremitting watch. About ten o'clock, he thought he beheld a light glimmering at a great distance. Fearing his eager hopes might deceive him, he called to Pedro Gutierrez, gentleman of the king's bed-chamber, and inquired whether he

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saw such a light ; the latter replied in the affirmative. Doubtful whether it might not yet be some delusion of fancy, Columbus called Rodrigo Sanchez of Segovia, and made the same inquiry. By the time the latter had ascended the round-house, the light had disappeared. They saw it once or twice afterwards in sudden and passing gleams ; as if it were a torch in the bark of a fisherman, rising and sinking with the waves ; or in the hand of some person on shore, borne up and down as he walked from house to house. So transient and uncertain were these gleams, that few attached any importance to them ; Columbus, however, considered them as certain signs of land, and, moreover, that the land was inhabited.

They continued their course until two in the morning, when a gun from the *Pinta* gave the joyful signal of land. It was first described by a mariner named Rodrigo de Triana ; but the reward was afterwards adjudged to the admiral, for having previously perceived the light. The land was now clearly seen about two leagues distant, whereupon they took in sail, and laid to, waiting impatiently for the dawn.

The thoughts and feelings of Columbus in this little space of time must have been tumultuous and intense. At length, in spite of every difficulty and danger, he had accomplished his object. The great mystery of the ocean was revealed ; his theory, which had been the scoff of sages, was triumphantly established ; he had secured to himself a glory durable as the world itself.

It is difficult to conceive the feelings of such a man, at such a moment ; or the conjectures which must have thronged upon his mind, as to the land before him, covered with darkness. That it was fruitful, was evident from the vegetables which floated from its shores. He thought, too, that he perceived the

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fragrance of aromatic groves. The moving light he had beheld proved it the residence of man. But what were its inhabitants? Were they like those of the other parts of the globe; or were they some strange and monstrous race, such as the imagination was prone in those times to give to all remote and unknown regions? Had he come upon some wild island far in the Indian sea; or was this the famed Cipango itself, the object of his golden fancies? A thousand speculations of the kind must have swarmed upon him, as, with his anxious crews, he waited for the night to pass away; wondering whether the morning light would reveal a savage wilderness, or dawn upon spicy groves, and glittering fanes, and gilded cities, and all the splendour of oriental civilization.

It was on Friday morning, the 12th of October, that Columbus first beheld the new world. As the day dawned he saw before him a level island, several leagues in extent, and covered with trees like a continual orchard. Though apparently uncultivated, it was populous, for the inhabitants were seen issuing from all parts of the woods and running to the shore. They were perfectly naked, and, as they stood gazing at the ships, appeared by their attitudes and gestures to be lost in astonishment. Columbus made a signal for the ships to cast anchor, and the boats to be manned and armed. He entered his own boat, richly attired in scarlet, and holding the royal standard; whilst Martin Alonzo Pinzon, and Vincent Jañez his brother, put off in company in their boats, each with a banner of the enterprise emblazoned with a green cross, having on either side the letters F. and Y., the initials of the Castilian monarchs Fernando and Ysabel, surmounted by crowns.

As he approached the shore, Columbus, who was

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disposed for all kinds of agreeable impressions, was delighted with the purity and suavity of the atmosphere, the crystal transparency of the sea, and the extraordinary beauty of the vegetation. He beheld, also, fruits of an unknown kind upon the trees which overhung the shores. On landing he threw himself on his knees, kissed the earth, and returned thanks to God with tears of joy. His example was followed by the rest, whose hearts indeed overflowed with the same feelings of gratitude. Columbus then rising drew his sword, displayed the royal standard, and assembling round him the two captains, with Rodrigo de Escobedo, notary of the armament, Rodrigo Sanchez, and the rest who had landed, he took solemn possession in the name of the Castilian sovereigns, giving the island the name of San Salvador. Having complied with the requisite forms and ceremonies, he called upon all present to take the oath of obedience to him, as admiral and viceroy, representing the persons of the sovereigns.

The feelings of the crew now burst forth in the most extravagant transports. They had recently considered themselves devoted men, hurrying forward to destruction; they now looked upon themselves as favourites of fortune, and gave themselves up to the most unbounded joy. They thronged around the admiral with overflowing zeal, some embracing him, others kissing his hands. Those who had been most mutinous and turbulent during the voyage, were now most devoted and enthusiastic. Some begged favours of him, as if he had already wealth and honours in his gift. Many abject spirits, who had outraged him by their insolence, now crouched at his feet, begging pardon for all the trouble they had caused him, and promising the blindest obedience for the future.

The natives of the island, when, at the dawn of

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day, they had beheld the ships hovering on their coast, had supposed them monsters which had issued from the deep during the night. They had crowded to the beach, and watched their movements with awful anxiety. Their veering about, apparently without effort, and the shifting and furling of their sails, resembling huge wings, filled them with astonishment. When they beheld their boats approach the shore, and a number of strange beings clad in glittering steel, or raiment of various colours, landing upon the beach, they fled in affright to the woods. Finding, however, that there was no attempt to pursue nor molest them, they gradually recovered from their terror, and approached the Spaniards with great awe; frequently prostrating themselves on the earth, and making signs of adoration. During the ceremonies of taking possession, they remained gazing in timid adoration at the complexion, the beards, the shining armour, and splendid dress of the Spaniards. The admiral particularly attracted their attention, from his commanding height, his air of authority, his dress of scarlet, and the deference which was paid him by his companions; all which pointed him out to be the commander. When they had still further recovered from their fears, they approached the Spaniards, touched their beards, and examined their hands and faces, admiring their whiteness. Columbus was pleased with their gentleness and confiding simplicity, and suffered their scrutiny with perfect acquiescence, winning them by his benignity. They now supposed that the ships had sailed out of the crystal firmament which bounded their horizon, or had descended from above on their ample wings, and that these marvellous beings were inhabitants of the skies.

The natives of the island were no less subjects of curiosity to the Spaniards, differing, as they did,

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from any race of men they had ever seen. Their appearance gave no promise of either wealth or civilization, for they were entirely naked, and painted with a variety of colours. With some it was confined merely to a part of the face, the nose, or around the eyes; with others it extended to the whole body, and gave them a wild and fantastic appearance. Their complexion was of a tawny or copper hue, and they were entirely destitute of beards. Their hair was not crisped, like the recently-discovered tribes of the African coast, under the same latitude, but straight and coarse, partly cut short above the ears, but some locks were left long behind, and falling upon their shoulders. Their features, though obscured and disfigured by paint, were agreeable; they had lofty foreheads and remarkably fine eyes. They were of moderate stature and well-shaped; most of them appeared to be under thirty years of age: there was but one female with them, quite young, naked like her companions, and beautifully formed.

As Columbus supposed himself to have landed on an island at the extremity of India, he called the natives by the general appellation of Indians, which was universally adopted before the true nature of his discovery was known, and has since been extended to all the aboriginals of the New World.

" WASHINGTON IRVING, *The Life and Voyages of Christopher Columbus*

MAGELLAN SAILS INTO THE PACIFIC

[IN 1519, Ferdinand Magellan, a Portuguese in the service of the Spanish Government, determined to find out if, by sailing westwards, he could reach the

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East Indies or Spice Islands. At the age of thirty-seven Magellan had had plenty of adventures at sea and was an experienced navigator. He set out in September with a fleet of five ships and crossed the Atlantic to the coast of South America. His crew of 237 men belonged to more than a dozen nations and included one Englishman - Master Andrew of Bristol. Magellan's flag-ship was the *Trimdad*—to us a tiny vessel of just over 100 tons.

At first Magellan thought the mouth of the great river Plate was the channel for which he was seeking. Sailing further south his fleet ran into a series of furious gales so that the commander was glad to shelter in a safe harbour which he named Port St. Julian. He decided to remain there for the winter but the expedition nearly ended within a few days for Magellan had to crush a serious mutiny.

Eventually, after many exciting adventures, he found the strait which would lead him westward, ever since called the Magellan Straits. It was a terrible passage lasting four months. Many more months elapsed before they arrived at the Spice Islands. The crew suffered the most terrible privations but never seem to have lost faith in their black-bearded commander. From the Spice Islands they journeyed to the Philippines and there Magellan lost his life in a skirmish with the natives.

A single remaining ship, the *Victoria*, continued on its way round the Cape of Good Hope. When it limped back to Spain in 1522, it was the first ship to have sailed round the world.

There are various accounts of this famous voyage of Magellan, but much the best is written by a young Italian, Francisco Antonio Pigafetta. He was "desirous of seeing the wonderful things of the ocean" and persuaded Magellan to let him join the expedition. He was intensely proud of his commander,

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whom he describes as "our mirror, our light, our comforter, our true guide." His day-to-day journal of events is packed with interesting details of the people and places he visited. Most of all he enjoyed trading with the natives and boasts that "For a king of diamonds, which is a playing card, they gave me six fowls and thought they had cheated me."

Pigafetta describes the natives of Patagonia and their strange animals, which we recognise as a kind of llama. This young Italian who sailed with Magellan was only one of many of his countrymen who assisted Spanish and Portuguese exploration. Many expeditions were made under Italian captains—Columbus is the outstanding example—with Italian crews and in vessels built by Italian shipwrights and financed by Italian bankers, while Italian mathematicians were expert cartographers and instrument makers.]

The captain-general having resolved to make so long a voyage through the Ocean Sea, where furious winds and great storms are always reigning, but not desiring to make known to any of his men the voyage that he was about to make, so that they might not be cast down at the thought of doing so great and extraordinary a deed, as he did accomplish with the aid of God (the captains who accompanied him, hated him exceedingly, I know not why, unless because he was a Portuguese, and they Spaniards), prescribed the following orders and gave them to all the pilots and masters of his ships, so that the ships might not become separated from one another during the storms and night. These were [to the effect] that he would always precede the other ships at night, and they were to follow his ship which would have a large torch of wood, which they call *farol* [lantern]. He always carried that *farol* set at

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the poop of his ship as a signal so that they might always follow him. Another light was made by means of a lantern or by means of a piece of wicking made from a rush and called *esparto* rope which is well beaten in the water, and then dried in the sun or in the smoke—a most excellent material for such use. They were to answer him so that he might know by that signal whether all of the ships were coming together. . . .

We finally reached 49 and one-half degrees toward the Antarctic Pole. As it was winter, the ships entered a safe port to winter. We passed two months in that place without seeing anyone. One day we suddenly saw a man of giant stature on the shore of the port, dancing, singing, and throwing dust on his head. The captain-general sent one of our men to the giant so that he might perform the same actions as a sign of peace. Having done that, the man led the giant to an islet into the presence of the captain-general. When the giant was in the captain-general's and our presence, he marvelled greatly, and made signs with one finger raised upward, believing that we had come from the sky. He was so tall that we reached only to his waist, and he was well-proportioned. His face was large and painted red all over, while about his eyes he was painted yellow; and he had two hearts painted on the middle of his cheeks. His scanty hair was painted white. He was dressed in the skins of animals skilfully cown together. That animal has a head and ears as large as those of a mule, a neck and body like those of a camel, the legs of a deer, and the tail of a horse, like which it neighs, and that land has very many of them. His feet were shod with the same kind of skins which covered his body in the manner of shoes. In his hand he carried a short, heavy bow, with a cord somewhat thicker than those

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of the lute. . . . The captain-general had the giant given something to eat and drink, and among other things which were shown to him was a large steel mirror. When he saw his face, he was greatly terrified, and jumped back throwing three or four of our men to the ground. After that he was given some bells, a mirror, a comb, and certain Pater Noster's. The captain-general sent him ashore with four armed men. When one of his companions, who would never come to the ships, saw him coming with our men, he ran to the place where the others were, who came [down to the shore] all naked one after the other. When our men reached them, they began to dance and to sing, lifting one finger to the sky. . . .

A fortnight later we saw four of those giants without their arms for they had hidden them in certain bushes as the two whom we captured showed us. Each one was painted differently. The captain-general kept two of them—the youngest and best proportioned—by means of a very cunning trick, in order to take them to Spain. Had he used any other means [than those he employed], they could easily have killed some of us. The trick that he employed in keeping them was as follows. He gave them many knives, scissors, mirrors, bells, and glass beads; and those two having their hands filled with the said articles, the captain-general had two pairs of iron manacles brought, such as are fastened on the feet. He made motions that he would give them to the giants, whereat they were very pleased since those manacles were of iron, but they did not know how to carry them. They were grieved at leaving them behind but they had no place to put those gifts; for they had to hold the skin wrapped about them with their hands. The other two giants wished to help them, but the captain refused. Seeing that

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they were loth to leave those manacles behind, the captain made them a sign that he would put them on their feet, and that they could carry them away. They nodded, assent with the head. Immediately, the captain had the manacles put on both of them at the same time. When our men were driving home the cross bolt, the giants began to suspect something, but the captain assuring them, however, they stood still. When they saw later that they were tricked they raged like bulls, calling loudly for *Setebos* to aid them. With difficulty could we bind the hands of the other two, whom we sent ashore with nine of our men, in order that the giants might guide them to the place where the wife of one of the two whom we had captured was; for the latter expressed his great grief at leaving her by signs so that we understood [that he meant] her. While they were on their way, one of the giants freed his hands, and took to his heels with such swiftness that our men lost sight of him. . . . We found a strait on the day of the [feast of the] eleven thousand virgins [*i.e.* October 21st]. That strait is one hundred and ten leagues or 440 miles long, and it is one-half league broad, more or less. It leads to another sea called the Pacific Sea, and is surrounded by very lofty mountains laden with snow. Had it not been for the captain-general, we would not have found that strait, for we all thought and said that it was closed on all sides. But the captain-general who knew where to sail to find a well-hidden strait, sent two ships, the *San Antonio* and the *Concepcion* (for thus they were called), to discover what was inside the cape de la Baie [*i.e.* of the Bay]. We, with the other two ships, [namely], the flagship, called *Trimdad* and the other the *Victoria*, stayed inside the bay to await them. A great storm struck us that night, which lasted until the middle

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of next day, which necessitated our lifting anchor, and letting ourselves drift hither and thither about the bay. The other two ships suffered a head-wind and could not double a cape formed by the bay almost at its end, as they were trying to return to join us; so that they thought that they would have to run aground. But on approaching the end of the bay, and thinking that they were lost, they saw a small opening which did not appear to be an opening, but a sharp turn. Like desperate men they hauled into it, and thus they discovered the strait by chance. Seeing that it was not a sharp turn, but a strait with land, they proceeded farther, and found a bay. And then farther on they found another strait, and another bay larger than the first two. Very joyful they immediately turned back to inform the captain-general. We thought that they had been wrecked, first, by reason of the violent storm, and second, because two days had passed and they had not appeared, and also because of certain signals with smoke made by two of their men who had been sent ashore to advise us. And so, while in suspense, we saw the two ships with sails full and banners flying to the wind, coming toward us. When they neared us in this manner, they suddenly discharged a number of mortars, and burst into cheers. Then all together thanking God and the Virgin Mary, we went to seek the strait farther on.

After entering that strait, we found two openings, one to the southeast, and the other to the southwest. The captain-general sent the ship *San Antonio* together with the *Concepcion* to ascertain whether that opening which was toward the southeast had an exit into the Pacific Sea. The ship *San Antonio* would not await the *Concepcion* because it intended to flee and return to Spain—which it did. . . . We had gone to explore the other opening

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toward the southwest. Finding, however, the same strait continuously, we came upon a river which we called the river of Sardines, because there were many sardines near it. So we stayed there for four days in order to await the two ships. During that period we sent a well-equipped boat to explore the cape of the other sea. The men returned within three days, and reported that they had seen the cape and the open sea. The captain-general wept for joy, and called that cape, Cape Desire, for we had been desiring it for a long time. We turned back to look for the two ships, but we found only the *Concepcion*. Upon asking them where the other one was, John Seranno, who was captain and pilot of the former ship (and also of that ship that had been wrecked) replied that he did not know, and that he had never seen it after it had entered the opening. We sought it in all parts of the strait, as far as that opening whence it had fled, and the captain-general sent the ship *Victoria* back to the entrance of the strait to ascertain whether the ship was there. Orders were given them, if they did not find it, to plant a banner on the summit of some small hill with a letter in an earthen pot buried in the earth near the banner, so that if the banner were seen the letter might be found, and the ship might learn the course that we were sailing. For this was the arrangement made between us in case that we went astray one from the other. . . .

There is, at that latitude, during the summer season, there is no night, or if there is any night it is but short, and so in the winter with the day. When we were in that strait, the nights were only three hours long, and it was then the month of October. The land on the left-hand side of that strait turned toward the southeast and was low. We called that strait the strait of Patagonia. One finds the safest of ports

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every half-league in it, water, the finest of wood (but not of cedar), fish, sardines and missiglioni, while smallage a sweet herb (although there is also some that is bitter) grows around the springs. We ate of it for many days as we had nothing else. I believe that there is not a more beautiful or better strait in the world than that one. . . .

Wednesday, November 28th, 1520, we debouched from that strait, engulging ourselves in the Pacific Sea. We were three months and twenty days without getting any kind of fresh food. We ate biscuit, which was no longer biscuit, but powder of biscuits swarming with worms, for they had eaten the goods. It stank strongly of rats. We drank yellow water that had been putrid for many days. We also ate some ox hides that covered the top of the mainyard to prevent the yard from chafing the shrouds, and which had become exceedingly hard because of the sun, rain and wind. We left them in the sun for four or five days, and then placed them for a few moments on top of the embers, and so ate them; and often we ate sawdust from boards. Rats were sold for one-half ducado apiece, and even then we could not get them. But above all the other misfortunes the following was the worst. The gums of both the lower and upper teeth of some of our men swelled, so that they could not eat under any circumstances and therefore died. Nineteen men died from that sickness, and the giant together with an Indian from the country of Verzin. Twenty-five or thirty men fell sick [during that time] in the arms, legs, or in another place, so that but few remained well. However, I, by the grace of God, suffered no sickness. We sailed about four thousand leagues during those three months and twenty days through an open stretch in that Pacific Sea. In truth it is very pacific, for during that time we did not suffer

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any storm. We saw no land except two desert islets, where we found nothing but birds and trees, for which we called them the Unfortunate Isles. We found no anchorage, but near them saw many sharks. The first islet lies in fifteen degrees of south latitude, and the other in nine. Daily we made runs of fifty, sixty, or seventy leagues. Had not God and His blessed mother given us so good weather we would all have died of hunger in that exceeding vast sea. Of a verity I believe no such voyage will ever be made again.

A. PIGAFETTA, *Magellan's Voyage Around the World*
(trans. J. A. Robertson)

VASCO DA GAMA SAILS TO INDIA BY THE CAPE OF GOOD HOPE

[ONE of the greatest names in the history of exploration belongs to the period of Portuguese supremacy at sea, roughly occupying the fifteenth and sixteenth centuries. Portugal's long coastline and many sheltered harbours produced a fine race of hardy seamen. From the beginning of the fifteenth century, under the skilful guidance of Prince Henry the Navigator, they built ocean-going vessels and pushed their way down the coast of Africa. Henry was obsessed with the idea of opening a sea route to the Guinea Coast of Africa where he believed he would find the mythical Christian ruler Prester John, whose fabulously wealthy kingdom was thought to be first in Asia, then in Africa. Before his death in 1460 Prince Henry had colonised the Azores and Madeira, trained a skilled band of experienced navigators and explored the west coast of Africa as far as Gambia. In 1486 Bartholomew Diaz doubled

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the Cape of Good Hope and so made possible the ocean route to India. This was achieved by Vasco da Gama in one of the most momentous voyages ever made. Born about 1460 he was specially selected by the king to discover the ocean way to India. The voyage was not only one of exploration but an important commercial venture for the rich spice trade of the East. Da Gama carried with him eighteen men who had been condemned to death but reprieved to make the voyage. Selected for their knowledge of Arabic they were to be landed in strange lands and left to make peace with the natives until the return of the ships. They were to serve as Portuguese ambassadors and commercial agents.

Da Gama's fleet consisted of four vessels—the *St. Gabriel* and the *St. Raphael*, both specially built and equipped for the voyage, and two smaller vessels carrying stores. It was a long and tedious journey which taxed the patience and fortitude of the sailors to the utmost, and Vasco da Gama's brilliant leadership, foresight, and skill in carrying through the enterprise ranks him with the other two great navigators of that century—Columbus and Magellan. In an ocean voyage of two years, during which da Gama had to burn the *St. Raphael* because of the serious depletion in his numbers—more than a third died from scurvy,—he landed at Calicut on the coast of India and returned to Lisbon in July 1499. His voyage had covered about 28,000 miles and he arrived back in triumph with merchandise of gold and silver, spices and jewels.

His wonderful achievement meant that Portugal was to be the greatest power in India and the East for some considerable time; the Portuguese were soon known as Lords of the Indian Ocean and it is interesting to recall that Magellan served a seven years' apprenticeship in India. As a result of Por-

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tuguese exploration the riches of the East were diverted from Venice to Lisbon and sea power shifted from the Mediterranean to the Atlantic seaboard. To this day Portugal has colonies scattered throughout Africa and the eastern seas.]

At daybreak of Thursday, 16th November, [1497] having careened our ships and taken in wood, we set sail. At that time we did not know how far we might be abaft the Cape of Good Hope. Pero d'Alenquer thought the distance about thirty leagues, but he was not certain, for on his return voyage [when with B. Diaz] he had left the Cape in the morning and had gone past this bay with the wind astern, whilst on the outward voyage he had kept at sea, and was therefore unable to identify the locality where we now were. We therefore stood out towards the south-south-west, and late on Saturday [November 18th] we beheld the cape. On that same day we again stood out to sea, returning to the land in the course of the night. On Sunday morning, 19th November, we once more made for the Cape, but were again unable to round it, for the wind blew from the south-south-west, whilst the Cape juts out towards the south-west. We then again stood out to sea, returning to the land on Monday night. At last, on Wednesday at noon, having the wind astern we succeeded in doubling the Cape, and then ran along the coast.

To the south of this Cape of Good Hope, and close to it, a vast bay six leagues broad at its mouth, enters about six leagues into the land.

Late on Saturday, 25th November, the day of St. Catherine, we entered the bay (*angra*) of São Brás, where we remained for thirteen days, for there we broke up our store-ship and transferred her contents to the other vessels.

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On Friday, whilst still in the bay of São Brás, about ninety men resembling those we had met at St. Helena Bay made their appearance. Some of them walked along the beach, whilst others remained upon the hills. All, or most of us, were at the time in the captain-major's vessel. As soon as we saw them we launched and armed the boats, and started for the land. When close to the shore the captain-major threw them little round bells, which they picked up. They even ventured to approach us, and took some of these bells from the captain-major's hand. This surprised us greatly, for when Bartolomeu Dias was here the natives fled without taking any of the objects which he offered them. Nay, on one occasion, when Dias was taking in water, close to the beach, they sought to prevent him, and when they pelted him with stones, from a hill, he killed one of them with the arrow of a cross-bow.' It appeared to us that they did not fly on this occasion, because they had heard from the people at the bay of St. Helena (only sixty leagues distant by sea) that there was no harm in us, and that we even gave away things which were ours.

The captain-major did not land at this spot, because there was much bush, but proceeded to an open part of the beach, when he made signs to the negroes to approach. This they did. The captain-major and the other captains then landed, being attended by armed men, some of whom carried cross-bows. He then made the negroes understand, by signs, that they were to disperse, and to approach him only singly or in couples. To those who approached he gave small bells and red caps, in return for which they presented him with ivory bracelets, such as they wore on their arms, for it appears that elephants are plentiful in this country. We actually found some of their droppings near the watering-

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place where they had gone to drink.

On Saturday about two hundred negroes came, both young and old. They brought with them about a dozen oxen and cows and four or five sheep. As soon as we saw them we went ashore. They forthwith began to play on four or five flutes, some producing high notes and others low ones, thus making a pretty harmony for negroes who are not expected to be musicians; and they danced in the style of negroes. The captain-major then ordered the trumpets to be sounded, and we, in the boats, danced, and the captain-major did so likewise when he rejoined us. This festivity ended, we landed where we had landed before, and bought a black ox for three bracelets. This ox we dined off on Sunday. We found him very fat, and his meat as toothsome as the beef of Portugal.

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There is an island in this bay, three bowshots from the land, where there are many seals. Some of these are as big as bears, very formidable with large tusks. These attack man, and no spear, whatever the force with which it is thrown, can wound them. There are others much smaller and others quite small. And whilst the big ones roar like lions, the little ones cry like goats. One day, when we approached this island for our amusement, we counted, among large and small ones, 3,000, and we fired among them with our bombards from the sea. On the same island there are birds as big as ducks, but they cannot fly, because they have no feathers on their wings. These birds, of whom we killed as many as we chose, are called *fotilicaios*, and they bray like asses.

Whilst taking in water in this bay of São Brás, on a Wednesday, we erected a cross and a pillar.

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The cross was made out of a mizzen-mast, and very high. On the following Thursday, when about to sail, we saw about ten or twelve negroes, who demolished both the cross and the pillar before we left.

Having taken on board all we stood in need of we took our departure, but as the wind failed us we anchored the same day, having proceeded only two leagues.

On Friday morning, the day of the Immaculate Conception, we again set sail. On Tuesday, the eve of Santa Lucia, we encountered a great storm, and ran before a stern-wind with the foresail much lowered. On that day we lost sight of Nicolau Coelho, but at sunset we saw him from the top four or five leagues astern, and it seemed as if he saw us too. We exhibited signal lights and lay to. By the end of the first watch he had come up with us, not because he had seen us during the day, but because, the wind being scant, he could not help coming in our waters.

On the morning of Friday we saw the land near the Ilheus Chãos (Flat Islands). These are five leagues beyond the Ilheu da Cruz (Cross Island). From the bay of São Brás to Cross Island is a distance of sixty leagues, and as much from the Cape of Good Hope to the bay of São Brás. From the Flat Islands to the last pillar erected by Bartolomeu Dias is five leagues, and from this pillar to the Rio do Infante is fifteen leagues.

On Saturday we passed the last pillar, and as we ran along the coast we observed two men running along the beach in a direction contrary to that which we followed. The country here is very charming and well wooded; we saw much cattle, and the further we advanced the more did the character of the country improve, and the trees increase in size.

During the following night we lay to. We were

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then already beyond the last discovery made by Bartolomeu Dias. On the next day till vespers, we sailed along the coast before a stern-wind, when the wind springing round to the east we stood out to sea. And thus we kept making tracks until sunset on Tuesday, when the wind again veered to the west. We then lay to during the night, in order that we might on the following day examine the coast and find out where we were.

In the morning we made straight for the land, and at ten o'clock found ourselves once more at the Ilheu da Cruz (Cross Island), that is sixty leagues abaft our dead reckoning! This was due to the currents, which are very strong here.

That very day we again went forward by the route we had already attempted, and being favoured during three or four days by a strong stern-wind, we were able to overcome the currents which we had feared might frustrate our plans. Henceforth it pleased God in His mercy to allow us to make headway! We were not again driven back. May it please Him that it be thus always!

By Christmas Day, 25th December, we had discovered seventy leagues of coast [beyond Diaz's furthest]. On that day, after dinner, when setting a studding-sail, we discovered that the mast had sprung a couple of yards below the top, and that the crack opened and shut. We patched it up with backstays, hoping to be able to repair it thoroughly as soon as we should reach a sheltered port.

On Thursday we anchored near the coast, and took much fish. At sunset we again set sail and pursued our route. At that place the mooring-rope snapped and we lost an anchor.

We now went so far out to sea, without touching any port, that drinking-water began to fail us, and our food had to be cooked with salt water. Our

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daily ration of water was reduced to a *quartilho*. It thus became necessary to seek a port.

On Thursday, 11th January (1498), we discovered a small river and anchored near the coast. On the following day we went close in shore in our boats, and saw a crowd of negroes, both men and women. They were tall people, and a chief (*senhor*) was among them. The captain-major ordered Martin Affonso, who had been a long time in Manicongo, and another man, to land. They were received hospitably. The captain-major, in consequence, sent the chief a jacket, a pair of red pantaloons, a Moorish cap, and a bracelet. The chief said that we were welcome to anything in his country of which we stood in need: at least, this is how Martin Affonso understood him. That night, Martin Affonso and his companion accompanied the chief to his village, whilst we returned to the ships. On the road the chief donned the garments which had been presented to him, and to those who came forth to meet him he said with much apparent satisfaction: "Look, what has been given to me!" The people upon this clapped hands as a sign of courtesy, and this they did three or four times until he arrived at the village. Having paraded the whole of the place, thus dressed up, the chief retired to his house, and ordered his two guests to be lodged in a compound, where they were given porridge of millet, which abounds in that country, and a fowl, just like those of Portugal. All the night through, numbers of men and women came to have a look at them. In the morning the chief visited them, and asked them to go back to the ships. He ordered two men to accompany them, and gave them fowls as a present for the captain-major, telling them at the same time that he would show the things that had been given him to a great chief, who appears to be the king of that country. When our men

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reached the landing place where our boats awaited them, they were attended by quite two hundred men, who had come to see them.

This country seemed to us to be densely peopled. There are many chiefs, and the number of women seems to be greater than that of the men, for among those who came to see us there were forty women to every twenty men. The houses are built of straw. The arms of the people include long-bows and arrows and spears with iron blades. Copper seems to be plentiful, for the people wore [ornaments] of it on their legs and arms and in their twisted hair. Tin, likewise, is found in the country, for it is to be seen on the hilts of their daggers, the sheaths of which are made of ivory. Linen cloth is highly prized by the people, who were always willing to give large quantities of copper in exchange for shirts. They have large calabashes in which they carry sea-water inland, where they pour it into pits to obtain the salt [by evaporation].

We stayed five days at this place, taking in water, which our visitors conveyed to our boats. Our stay was not, however, sufficiently prolonged to enable us to take in as much water as we really needed, for the wind favoured a prosecution of our voyage.

The people of this country are of ruddy complexion and well made. They are Mohammedans, and their language is the same as that of the Moors. Their dresses are of fine linen or cotton stuffs, with variously coloured stripes, and of rich and elaborate workmanship. They all wear *toucas* with borders of silk embroidered in gold. They are merchants, and have transactions with white Moors, four of whose vessels were at the time in port, laden with gold, silver, cloves, pepper, ginger, and silver rings, as also with

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quantities of pearls, jewels, and rubies, all of which articles are used by the people of this country. We understood them to say that all these things, with the exception of the gold, were brought thither by these Moors; that further on, where we were going to, they abounded, and that precious stones, pearls, and spices were so plentiful that there was no need to purchase them, as they could be collected in baskets. All this we learned through a sailor the captain-major had with him, and who, having formerly been a prisoner among the Moors, understood their language.

These Moors, moreover, told us that along the route which we were about to follow we should meet with numerous shoals; that there were many cities along the coast, and also an island, one-half of the population of which consisted of Moors and the other half of Christians, who were at war with each other. The island was said to be very wealthy.

We were told, moreover, that Prester John resided not far from this place; that he held many cities along the coast, and that the inhabitants of those cities were great merchants and owned big ships. The residence of Prester John was said to be far in the interior, and could be reached only on the back of camels. These Moors had also brought hither two Christian captives from India. This information, and many other things which we heard, rendered us so happy that we cried with joy, and prayed to God to grant us health, so that we might behold what we so much desired.

In this place and island of Moncobiquy (Mozambique) there resided a chief (*senhor*) who had the title of sultan, and was like a viceroy. He often came aboard our ships attended by some of his people. The captain-major gave him many good things to eat, and made him a present of hats, *marlotas*, corals, and many other articles. He was,

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however, so proud that he treated all we gave him with contempt, and asked for scarlet cloth, of which we had none. We gave him, however, of all the things we had.

One day the captain-major invited him to a repast, when there was an abundance of figs and comfits, and begged him for two pilots to go with us. He at once granted this request, subject to our coming to terms with them. The captain-major gave each of them thirty *milkals* in gold and two *marlotas*, on condition that from the day on which they received this payment one of them should always remain on board if the other desired to go on land. With these terms they were well satisfied.

On Saturday, 10th March, we set sail and anchored out at sea, close to an island, where mass was said on Sunday, when those who wished to do so confessed and joined in the communion.

One of our pilots lived on the island, and when we had anchored we armed two boats to go in search of him. The captain-major went in one boat and Nicolau Coelho in the other. They were met by five or six boats (*barcas*) coming from the island, and crowded with people armed with bows and long arrows and bucklers, who gave them to understand by signs that they were to return to the town. When the captain saw this he secured the pilot whom he had taken with him, and ordered the bombards to fire upon the boats. Paulo da Gama, who had remained with the ship, so as to be prepared to render succour in case of need, no sooner heard the reports of the bombards than he started in the *Berrio*. The Moors, who were already flying, fled still faster, and gained the land before the *Berrio* was able to come up with them. We then returned to our anchorage.

The vessels of this country are of good size and decked. There are no nails, and the planks are held

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together by cords, as are also those of their boats (*barcos*). The sails are made of palm-matting. Their mariners have Genoese needles, by which they steer, quadrants, and navigating charts.

The palms of this country [Mozambique] yield a fruit as large as a melon, of which the kernel is eaten. It has a nutty flavour. There also grow in abundance melons and cucumbers, which were brought to us for barter.

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On the following Sunday we once more saw the North Star, which we had not seen for a long time.

On Friday, 18th May, after having seen no land for twenty-three days, we sighted lofty mountains, and having all this time sailed before the wind we could not have made less than 600 leagues. The land, when first sighted, was at a distance of eight leagues, and our lead reached bottom at forty-five fathoms. That same night we took a course to the south-south-west, so as to get away from the coast. On the following day we again approached the land, but owing to the heavy rain and a thunderstorm, which prevailed whilst we were sailing along the coast, our pilot was unable to identify the exact locality. On Sunday [May 20th] we found ourselves close to some mountains, and when we were near enough for the pilot to recognise them he told us that they were above Calicut, and that this was the country we desired to go to.

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That night we anchored two leagues from the city of Calicut, and we did so because our pilot mistook Capua, a town at that place, for Calicut. Still further, there is another town called Pandarani. We anchored about a league and a half from the shore. After we were at anchor, four boats (*almadias*) approached us from the land, who asked of what

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nation we were. We told them, and they then pointed out Calicut to us.

On the following day these same boats came again alongside, when the major-captain sent one of the convicts to Calicut, and those with whom he went took him to two Moors from Tunis, who could speak Castilian and Genoese. The first greeting that he received was in these words: "May the devil take thee! What brought you hither?" They asked what he sought so far away from home, and he told them he came in search of Christians and of spices. They said: "Why does not the King of Castile, the King of France, or the Signoria of Venice send hither?" He said that the King of Portugal would not consent to their doing so, and they said he did the right thing. After this conversation they took him to their lodgings and gave him wheaten bread and honey. When he had eaten he returned to the ships, accompanied by one of the Moors, who was no sooner on board, than he said these words: "A lucky venture, a lucky venture! Plenty of rubies, plenty of emeralds! You owe great thanks to God for having brought you to a country holding such riches!" We were greatly astonished to hear his talk, for we never expected to hear our language spoken so far away from Portugal.

The city of Calicut is inhabited by Christians. They are of tawny complexion. Some of them have big beards and long hair, whilst others clip their hair short or shave the head, merely allowing a tuft to remain on the crown as a sign that they are Christians. They also wear moustaches. They pierce the ears and wear much gold in them. They go naked down to the waist, covering their lower extremities with very fine cotton stuffs. But it is only the most respectable who do this, for the others manage as best they are able.

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The women of this country, as a rule, are ugly and of small stature. They wear many jewels of gold round the neck, numerous bracelets on their arms, and rings set with precious stones on their toes. All these people are well disposed and apparently of mild temper. At first sight they seem covetous and ignorant.

When we arrived at Calicut the king was fifteen leagues away. The captain-major sent two men to him with a message, informing him that an ambassador had arrived from the King of Portugal with letters, and that if he desired it he would take them to where the king then was.

The king presented the bearers of this message with much fine cloth. He sent word to the captain bidding him welcome, saying that he was about to proceed to Calicut. As a matter of fact, he started at once with a large retinue.

A pilot accompanied our two men, with orders to take us to a place called Pandarani, below the place [Capua] where we were anchored at first. At this time we were actually in front of the city of Calicut. We were told that the anchorage at the place to which we were to go was good, whilst at the place we were then it was bad, with a stony bottom, which was quite true; and, moreover, that it was customary for the ships which came to this country to anchor there for the sake of safety. We ourselves did not feel comfortable, and the captain-major had no sooner received this royal message than he ordered the sails to be set, and we departed. We did not, however, anchor as near the shore as the king's pilot desired.

When we were at anchor, a message arrived informing the captain-major that the king was already in the city. At the same time the king sent a *bale*, with other men of distinction, to Pandarani, to conduct the captain-major to where the king awaited

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him. This *bale* is like an *alcaide*, and is always attended by two hundred men armed with swords and bucklers. As it was late when this message arrived, the captain-major deferred going.

On the following morning, which was Monday, 28th May, the captain-major set out to speak to the king, and took with him thirteen men, of whom I was one. We put on our best attire, placed bombards in our boats, and took with us trumpets and many flags. On landing, the captain-major was received by the *alcaide*, with whom were many men, armed and unarmed. The reception was friendly, as if the people were pleased to see us, though at first appearances looked threatening, for they carried naked swords in their hands. A palanquin was provided for the captain-major, such as is used by men of distinction in that country, as also by some of the merchants, who pay something to the king for this privilege. The captain-major entered the palanquin, which was carried by six men by turns. Attended by all these people we took the road of Calicut, and came first to another town, called Capua. The captain-major was there deposited at the house of a man of rank, whilst we others were provided with food, consisting of rice, with much butter, and excellent boiled fish. The captain-major did not wish to eat, and when we had done so, we embarked on a river close by, which flows between the sea and the mainland, close to the coast. The two boats in which we embarked were lashed together, so that we were not separated. There were numerous other boats, all crowded with people. As to those who were on the banks I say nothing; their number was infinite, and they had all come to see us. We went up that river for about a league, and saw many large ships drawn up high and dry on its banks, for there is no port here.

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When we disembarked, the captain-major once more entered his palanquin. The road was crowded with a countless multitude anxious to see us. Even the women came out of their houses with children in their arms and followed us.

Vasco da Gama (trans. E. G. Ravenstein,
Hakluyt Society)

RALEIGH'S SEARCH FOR EL DORADO

[SIR WALTER RALEIGH (1552-1618) was an unusually gifted man. He distinguished himself as a scholar, poet, courtier, soldier, and sailor and is said to have introduced into this country the potato plant and tobacco. From early youth he had been interested in the New World and had probably accompanied his illustrious half-brother, Sir Humphrey Gilbert, to Newfoundland in 1578. He tried to found a colony in Virginia but the enterprise, owing to the misconduct of the colonists, failed miserably and cost Raleigh a fortune. From various causes, Raleigh fell into disfavour at Court. He wrote to Queen Elizabeth, "Your Majesty having left me, I am all alone in the world. I am forgotten in all rights and in all affairs, and mine enemies have their wills and desires over me." But the Queen turned a deaf ear. Raleigh decided to win back his reputation by finding El Dorado—the Golden City which was supposed to be in the interior of South America. A year before the expedition set out he sent a ship to Trinidad to make preparations and inquiries. The Captain returned with strange stories of rich treasure and of a headless tribe which existed far in the interior.]

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Raleigh sailed away from Plymouth in 1595 with five ships and many smaller boats. His task was not an easy one for it meant trespassing into the country claimed by the King of Spain. However, he tricked the Spanish Governor into his power, obtained valuable information about the nature of the country and set out to explore the river Orinoco. Raleigh tells his own adventures in what must be one of the best travel stories in the history of exploration.]

At four days' end we fell into as goodly a river as ever I beheld, which was called the great Amana, which ran more directly without windings and turnings than the other; but soon after, the flood of the sea left us, and we were enforced either by main strength to row against a violent current, or to return as wise as we went out. We had then no shift but to persuade the companies that it was but two or three days' work, and therefore desired them to take pains, every gentleman and others taking their turns to row, and to spell one the other at the hour's end. Every day we passed by goodly branches of rivers, some falling from the west, others from the east, into Amana. . . . When three days more were over-gone, our companies began to despair, the weather being extreme hot, the river bordered with very high trees that kept away the air, and the current against us every day stronger than other; but we evermore commanded our pilots to promise an end the next day . . . but so long we laboured as many days were spent, and so driven to draw ourselves to harder allowance, our bread even at the last, and no drink at all; and our men and ourselves so wearied and scorched, and doubtful withal whether we should ever perform it or no, the heat increasing as we drew towards the line; for we were now in five degrees.

The further we went on (our victual decreasing,

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and the air breeding great faintness,) we grew weaker and weaker when we had most need of strength and ability; for hourly the river ran more violently against us, and the barge wherries, and ship's boat of captain Gifford and captain Calfield had spent all their provisions, so we were brought into despair and discomfort, had we not persuaded all the company that it was but only one day's work more to attain the land, where we should be relieved of all we wanted; and if we returned, that we were sure to starve by the way, and that the world would also laugh us to scorn. On the banks of these rivers were divers sorts of fruits good to eat, flowers and trees of that variety as were sufficient to make ten volumes of herbals. We relieved ourselves many times with the fruits of the country, and sometimes with fowl and fish: we saw birds of all colours, some carnation, some crimson, orange tawny, purple, green, watchet, and of all other sorts, both simple and mixed; as it was unto us a great good passing of the time to behold them, besides the relief we found by killing some store of them with our fowling pieces, without which, having little or no bread, and less drink, but only the thick and troubled water of the river, we had been in a very hard case.

Our old pilot of the Ciawani told us, that if we would enter a branch of a river on the right hand with our barge and wherries, and leave the galley at anchor the while in the great river, he would bring us to a town of the Arwacas, where we should find store of bread, hens, fish, and of the country wine, and persuaded us, that departing from the galley at noon, we might return ere night. I was very glad to hear this speech, and presently took my barge, with eight musketeers, captain Gifford's wherry, with himself and four musketeers, and captain Calfield with his wherry and as many, and so we entered the

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mouth of this river. Because we were persuaded that it was so near, we took no victual with us at all. When we had rowed three hours, we marvelled we saw no sign of any dwelling, and asked the pilot where the town was; he told us a little further. After three hours more, the sun being almost set, we began to suspect that he led us that way to betray us, for he confessed that those Spaniards which fled from Trinidad, and also those that remained with Carapana in Emeria, were joined together in some village upon that river. But when it grew towards night, and we demanding where the place was, he told us but four reaches more: when we had rowed four and four we saw no sign, and our poor watermen, even heart-broken and tired, were ready to give up the ghost: for we had now come from the galley near forty miles.

At the last we determined to hang the pilot, and, if we had well known the way back again by night, he had surely gone; but our own necessities pleaded sufficiently for his safety: for it was as dark as pitch, and the river began so to narrow itself, and the trees to hang over from side to side, as we were driven with arming swords to cut a passage through those branches that covered the water. We were very desirous to find this town, hoping of a feast, because we made but a short breakfast aboard the galley in the morning, and it was now eight o'clock at night, and our stomachs began to gnaw apace; but whether it was best to return or go on we began to doubt, suspecting treason in the pilot more and more; but the poor old Indian ever assured us that it was but a little further, and but this one turning and that turning; and at last, about one o'clock after midnight, we saw a light, and rowing towards it we heard the dogs of the village. When we landed, we found few people; for the lord of that place was gone

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with divers canoes above four hundred miles off, upon a journey towards the head of Oroonoko, to trade for gold, and to buy women of the cannibals, who afterward unfortunately passed by us, as we rode at an anchor in the port of Morequito, in the dark of night, and yet came so near us, as his canoes grated against our barges. He left one of his company at the port of Morequito, by whom we understood that he had brought thirty young women, divers plates of gold, and had great store of fine pieces of cotton cloth, and cotton beds. In his house we had good store of bread, fish, hens, and Indian drink, and so rested that night; and in the morning, after we had traded with such of his people as came down, we returned towards our galley, and brought with us some quantity of bread, fish, and hens.

On both sides of this river we passed the most beautiful country that ever mine eyes beheld; and whereas all that we had seen before was nothing but woods, prickles, bushes, and thorns, here we beheld plains of twenty miles in length, the grass short and green, and in divers parts groves of trees by themselves, as if they had been by all the art and labour in the world so made of purpose: and still as we rowed, the deer came down feeding by the water's side, as if they had been used to a keeper's call. Upon this river there were great store of fowl, and of many sorts: we saw in it divers sorts of strange fishes, and of marvellous bigness; but for lagartos it exceeded; for there were thousands of those ugly serpents, and the people call it for the abundance of them the river of Lagartos, in their language. I had a negro, a very proper young fellow, that, leaping out of the galley to swim in the mouth of this river, was in all our sights taken and devoured with one of those legartos. In the meanwhile our

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companies in the galley thought we had been all lost, (for we promised to return before night,) and sent the *Lion's Whelp's* ship's boat with captain Whiddon to follow us up the river; but the next day, after we had rowed up and down some four-score miles, we returned, and went on our way up the great river, and, when we were even at the last cast for want of victuals, captain Gifford being before the galley and the rest of the boats, seeking out some place to land upon the banks to make fire, espied four canoes coming down the river, and with no small joy caused his men to try the uttermost of their strengths, and after a while two of the four gave over, and ran themselves ashore, every man betaking himself to the fastness of the woods. The two lesser got away while he landed to lay hold on these, and so turned into some by-creek, we knew not whither: those canoes that were taken were laden with bread, and were bound for Marguerita in the West Indies, which those Indians, called Arwacas, purposed to carry thither for exchange: but in the lesser there were three Spaniards, who having heard of the defeat of their governor in Trinedado, and that we purposed to enter Guiana, came away in those canoes: one of them was a cavallero, as the captain of the Arwacas after told us, another a soldier, and the third a refiner.

In the meantime nothing on earth could have been more welcome to us, next unto gold, than the great store of very excellent bread which we found in these canoes; for now our men cried, Let us go on, we care not how far. After that captain Gifford had brought the two canoes to the galley, I took my barge, and went to the bank's side with a dozen shot, where the canoes first ran themselves ashore, and landed there, sending out captain Gifford and captain Thyn on one hand, and captain Calfield on the

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other, to follow those that were fled into the woods. As I was creeping through the bushes I saw an Indian basket hidden, which was the refiner's basket; for I found in it his quicksilver, saltpetre, and divers things for the trial of metals, and also the dust of such ore as he had refined; but in those canoes which escaped there was a good quantity of ore and gold. I then landed more men, and offered five hundred pounds to what soldier soever could take one of those three Spaniards that we thought were landed: but our labours were in vain in that behalf; for they put themselves into one of the small canoes, and so, while the greater canoes were in taking, they escaped. Seeking after the Spaniards we found the Arwacas hidden in the woods, which were pilots for the Spaniards, and rowed their canoes: of which I kept the chiefest for a pilot, and carried him with me to Guiana, by whom I understood where and in what countries the Spaniards had laboured for gold, though I made not the same known to all: for when the springs began to break, and the rivers to raise themselves so suddenly, as by no means we could abide the digging of any mine; especially for that the richest are defended with rocks of hard stone, which we call the *white spar*, and that it required both time, men, and instruments fit for such a work; I thought it best not to hover thereabouts.

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Meanwhile myself with captain Gifford, captain Calfield, Edw. Hancock, and some half a dozen shot, marched over land to view the strange overfalls of the river of Caroli, which roared so far off, and also to see the plains adjoining, and the rest of the province of Canuri: I sent also captain Whiddon, W. Connock, and some eight shot with them, to see

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if they could find any mineral stone along the river's side. When we ran to the tops of the first hills of the plains adjoining to the river, we beheld that wonderful breach of waters which ran down Caroli: and might from that mountain see the river how it ran in three parts above twenty miles off; and there appeared some ten or twelve overfalls in sight, every one as high over the other as a church tower, which fell with that fury, that the rebound of waters made it seem as if it had been all covered over with a great shower of rain: and in some places we took it at the first for a smoke that had risen over some great town. For mine own part, I was well persuaded from thence to have returned, being a very ill footman; but the rest were all so desirous to go near the said strange thunder of waters, as they drew me on by little and little, till we came into the next valley, where we might better discern the same. I never saw a more beautiful country, nor more lively prospects, hills so raised here and there over the valleys, the river winding into divers branches, the plains adjoining without bush or stubble, all fair green grass, the ground of hard sand, easy to march on either for horse or foot, the deer crossing in every path, the birds towards the evening singing on every tree with a thousand several tunes, cranes and herons of white, crimson and carnation perching on the river's side, the air fresh, with a gentle easterly wind; and every stone that we stopped to take up promised either gold or silver by his complexion. And yet we had no means but with our daggers and fingers to tear them out here and there, the rocks being most hard of that mineral spar aforesaid, and is like a flint, and is altogether as hard or harder, and besides the veins lie a fathom or two deep in the rocks. . . .

Next unto Arvi there are two rivers, Atocia and Caora, and on that branch which is called Caora are

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a nation of people, whose heads appear not above their shoulders; which, though it may be thought a mere fable, yet for mine own part I am resolved it is true, because every child in the provinces of Arromaia and Canuri affirm the same: they are called Ewaipanoma: they are reported to have their eyes in their shoulders, and their mouths in the middle of their breasts, and that a long train of hair groweth backward between their shoulders. The son of Topiawari, which I brought with me into England, told me, that they are the most mighty men of all the land, and use bows, arrows and clubs, thrice as big as any of Guiana or of the Oroonokoponi, and that one of the Iwarawakeri took a prisoner of them the year before our arrival there, and brought him into the borders of Arromaia, his father's country; and further, when I seemed to doubt of it, he told me that it was no wonder among them; but that they were as great a nation, and as common, as any other in all the provinces, and had of late years slain many hundreds of his father's people, and of other nations their neighbours. But it was not my chance to hear of them till I was come away; and if I had but spoken one word of it while I was there, I might have brought one of them with me, to put the matter out of doubt. Such a nation was written of by Maundeville, whose reports were held for fables many years; and yet since the East Indies were discovered, we find his relations true of such things as heretofore were held incredible.

SIR WALTER RALEIGH, *The Discovery of Guiana*
(Oxford Edition, 1829)

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MARTIN FROBISHER AND THE ESKIMOS

[MARTIN FROBISHER (1535-1594), who was knighted for his services in connection with the defeat of the Spanish Armada, was the earliest of several British navigators to attempt to find the North-west Passage to India. Sir Humphrey Gilbert had written a learned work arguing that there must exist a strait to the north of America to balance the Straits of Magellan in the south and that it would prove a shorter route "to Cathaia and the East Indies." In 1576 Frobisher made the first of three voyages to Labrador and the Arctic regions. He sailed to the south of Greenland, which he believed was the fictitious Frisland, and thought he had discovered the strait; but it turned out to be a bay which now commemorates his name. The third voyage was made in 1578 and is described in full detail by George Best, who was captain of the *Anne Francis*, one of the fifteen ships under Frobisher's command. The unknown land known as *Meta Incognita*, "because that place and country hath never heretofore been discovered," was to be inhabited for a whole year by 100 men—40 mariners, 30 soldiers, and 30 miners who were to search for gold. No sooner was it proved that gold and silver were to be found than all pretence of further discovery was dropped.]

Best's account of the struggles in ice and storm gives a striking and truthful picture of the perils the men endured, while the Eskimos are described with

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fascinating freshness and vivacity. The text was edited by Richard Hakluyt, who included it in his great work *The Principal Navigations, Voyages, and Discoveries of the English Nation*, first published in 1589.]

Having received these Articles of Direction, we departed from *Harwich* the one and thirtieth of May. And sailing along the south part of *England* westward, we at length came by the coast of *Ireland* at *Cape Clear* the sixth of June, and gave chase there to a small bark which was supposed to be a pirate or rover on the seas. But it fell out indeed that they were poor men of *Bristow*, who had met with such company of Frenchmen as had spoiled and slain many of them, and left the rest so sore wounded that they were like to perish in the sea, having neither hand nor foot whole to help themselves with, nor victuals to sustain their hungry bodies. Our General, who well understood the office of a soldier and an Englishman, and knew well what the necessity of the sea meaneth, pitying much the misery of the poor men, relieved them with surgery and salves to heal their hurts, and with meat and drink to comfort their pining hearts; some of them having neither eaten nor drunk more than olives and stinking water in many days before, as they reported. And after this good deed done, having a large wind, we kept our course upon our said voyage without staying for the taking in of fresh water, or any other provision, whereof many of the fleet were not thoroughly furnished. And sailing towards the north-west parts from *Ireland*, we met with a great current from out of the south-west, which carried us, by our reckoning, one point to the north-eastwards of our said course; which current seemed to us to continue itself towards *Norway*, and the north-east parts of the world. . . .

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Now had we sailed about fourteen days without sight of land or any other living thing, except certain fowls, as willmots, noddies, gulls, etc., which there seem only to 'live by sea. The 20. of June, at two of the clock in the morning, the General descried land, and found it to be *West Frisland*, now named *West England*. Here the General and other gentlemen went ashore, being the first known Christians that we have true notice of that ever set foot upon that ground. And therefore the General took possession thereof to the use of our Sovereign Lady the Queen's Majesty, and discovered here a goodly harborough for the ships, where were also certain little boats of that country. And being there landed they espied certain tents and people of that country; which were, as they judge, in all sorts, very like those of *Meta Incognita*, as by their apparel, and other things which we found in their tents, appeared.

The savage and simple people so soon as they perceived our men coming towards them, supposing there had been no other world but theirs, fled fearfully away, as men much amazed at so strange a sight, and creatures of human shape, so far in apparel, complexion, and other things different from themselves. They left in their tents all their furniture for haste behind them, where amongst other things were found a box of small nails, and certain red herrings, boards of fir-tree well cut, with divers other things artificially wrought. Whereby it appeareth, that they have trade with some civil people, or else are indeed themselves artificial workmen. Our men brought away with them only two of their dogs, leaving in recompense bells, looking-glasses, and divers of our country toys behind them. This country, no doubt, promiseth good hope of great commodity and riches, if it may be well discovered; the description whereof you shall find more at large

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in the Second Voyage. Some are of opinion that this West *England* is firm land with the north-east parts of *Meta Incognita*, or else with *Greenland*. And their reason is, because the people, apparel, boats, and other things are so like to theirs; and another reason is, the multitude of islands of ice, which lay between it and *Meta Incognita*, doth argue, that on the north side there is a bay, which cannot be but by conjoining of the two lands together.

And having a fair and large wind we departed from thence towards *Frobisher's Straits* the 23. of June. But first we gave name to a high cliff in West *England*, the last that was in our sight, and for a certain similitude we called it *Charing Cross*. Then we bore southerly towards the sea; because to the northwards of this coast we met with much driving ice, which by reason of the thick mists and weather might have been some trouble unto us. On Monday, the last of June, we met with many great whales, as they had been porpoises. This same day the *Salamander*, being under both her courses and bonnets, happened to strike a great whale with her full stem, with such a blow that the ship stood still, and stirred neither forward nor backward. The whale thereat made a great and ugly noise, and cast up his body and tail, and so went under water; and within two days after there was found a great whale dead, swimming above water, which we supposed was that which the *Salamander* struck.

The second day of July, early in the morning, we had sight of the Queen's Foreland, and bore in with the land all the day, and passing thorough great quantity of ice, by night were entered somewhat within the Straits, perceiving no way to pass further in, the whole place being frozen over from the one side to the other, and as it were with many walls, mountains, and bulwarks of ice, choked up the passage,

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and denied us entrance. And yet do I not think that this passage or sea hereabouts is frozen over at any time of the year: albeit it seemed so unto us by the abundance of ice gathered together, which occupied the whole place. But I do rather suppose these ice to be bred in the hollow sounds and freshets thereabouts; which, by the heat of the summer's sun being loosed, do empty themselves with the ebbs into the sea, and so gather in great abundance there together.

And to speak somewhat here of the ancient opinion of the frozen sea in these parts: I do think it to be rather a bare conjecture of men, than that ever any man hath made experience of any such sea. And that which they speak of *Mare glâciale*, may be truly thought to be spoken of these parts; for this may well be called indeed the icy sea, but not the frozen sea, for no sea consisting of salt water can be frozen, as I have more at large herein shewed my opinion in my Second Voyage, for it seemeth impossible for any sea to be frozen which hath his course of ebbing and flowing, especially in those places where the tides do ebb and flow above ten fathom. And also all these aforesaid ice, which we sometime met a hundred mile from land, being gathered out of the salt sea, are in taste fresh, and being dissolved become sweet and wholesome water. . . .

We were forced many times to stem and strike great rocks of ice, and so as it were make way through mighty mountains. By which means some of the fleet, where they found the ice to open, entered in, and passed so far within the danger thereof, with continual desire to recover their port, that it was the greatest wonder of the world that they ever escaped safe, or were ever heard of again. For even at this present we missed two of the fleet, that is, the *Judith*, wherein was the Lieutenant-General Captain *Fenton*,

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and the *Michael*; whom both we supposed had been utterly lost, having not heard any tidings of them in more than 20 days before. And one of our fleet named the bark *Dennis*, being of an 160 ton burden, seeking way in amongst these ice, received such a blow with a rock of ice that she sunk down therewith in the sight of the whole fleet. Howbeit, having signified her danger by shooting off a piece of great ordnance, new succour of other ships came so readily unto them, that the men were all saved with boats. Within this ship that was drowned there was parcel of our house which was to be erected for them that should stay all the winter in *Meta Incognita*.

This was a more fearful spectacle for the fleet to behold, for that the outrageous storm which presently followed, threatened them the like fortune and danger. For the fleet being thus compassed, as aforesaid, on every side with ice, having left much behind them, thorough which they passed, and finding more before them, thorough which it was not possible to pass, there arose a sudden terrible tempest at the south-east, which blowing from the main sea directly upon the place of the Straits, brought together all the ice a sea-board of us upon our backs, and thereby debarred us of turning back to recover sea-room again; so that being thus compassed with danger on every side, sundry men with sundry devices sought the best way to save themselves. Some of the ships, where they could find a place more clear of ice, and get a little berth of sea-room, did take in their sails, and there lay adrift. Other some fastened and moored anchor upon a great island of ice, and rode under the lee thereof, supposing to be better guarded thereby from the outrageous winds, and the danger of the lesser fleeting ice. And again some were so fast shut up, and compassed in amongst an infinite number of great countries and

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islands of ice, that they were fain to submit themselves and their ships to the mercy of the unmerciful ice, and strengthened the sides of their ships with junks of cables, beds, masts, planks, and such like, which being hanged overboard on the sides of their ships, might the better defend them from the outrageous sway and strokes of the said ice. But as in greatest distress men of best valour are best to be discerned, so it is greatly worthy commendation and noting with what invincible mind every captain encouraged his company, and with what incredible labour the painful mariners and poor miners, unacquainted with such extremities, to the everlasting renown of our nation, did overcome the brunt of these so great and extreme dangers. For some, even without board upon the ice, and some within board upon the sides of their ships, having poles, pikes, pieces of timber, and oars in their hands, stood almost day and night without any rest, bearing off the force, and breaking the sway of the ice with such incredible pain and peril, that it was wonderful to behold; which otherwise no doubt had stricken quite through and through the sides of their ships, notwithstanding our former provision; for planks of timber of more than three inches thick, and other things of greater force and bigness, by the surging of the sea and billow, with the ice were shivered and cut in sunder, at the sides of our ships, so that it will seem more than credible to be reported of.

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And by late conference with a friend of mine, with whom I did sometime travel in the parts of *Muscovy*, who hath great experience of those *Samoeds* and people of the north-east, I find that in all their manner of living, those people of the north-east and these of the north-west are like. They are of the

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colour of a ripe olive, which how it may come to pass, being born in so cold a climate, I refer to the judgment of others ; for they are naturally born children of the same colour and complexion that all the Americans are, which dwell under the equinoctial line.

They are men very active and nimble. They are a strong people and very warlike, for in our sight upon the tops of the hills they would often muster themselves, and, after the manner of a skirmish, trace their ground very nimbly, and manage their bows and darts with great dexterity. They go clad in coats made of the skins of beasts, as of seals, deer, bears, foxes, and hares. They have also some garments of feathers, being made of the cases of fowls, finely sewed and compact together. Of all which sorts we brought home with us into *England*, which we found in their tents. In summer they use to wear the hairy side of their coats outward, and sometime go naked for too much heat. And in winter, as by signs they have declared, they wear four or five fold upon their bodies with the hair, for warmth, turned inwards. . . .

These people are in nature very subtle and sharp-witted, ready to conceive our meaning by signs, and to make answer well to be understood again. And if they have not seen the thing whereof you ask them, they will wink, or cover their eyes with their hands, as who would say, 'it hath been hid from their sight. If they understand you not whereof you ask them, they will stop their ears. They will teach us the names of each thing in their language which we desire to learn, and are apt to learn anything of us. They delight in music above measure, and will keep time and stroke to any tune which you shall sing, both with their voice, head, hand, and feet, and will sing the same tune aptly after you. They will row with our oars in our boats, and keep a true stroke

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with our mariners, and seem to take great delight therein. They live in caves of the earth, and hunt for their dinners or prey, even as the bear or other wild beasts do. They eat raw flesh and fish, and refuse no meat, howsoever it be stinking. They are desperate in their fight, sullen of nature, and ravenous in their manner of feeding. Their sullen and desperate nature doth herein manifestly appear, that a company of them being environed by our men on the top of a high cliff, so that they could by no means escape our hands, finding themselves in this case distressed, chose rather to cast themselves headlong down the rocks into the sea, and so be bruised and drowned, rather than to yield themselves to our men's mercies.

For their weapons to offend their enemies or kill their prey withal, they have darts, slings, bows, and arrows headed with sharp stones, bones, and some with iron. They are exceeding friendly and kind-hearted one to the other, and mourn greatly at the loss or harm of their fellows; and express their grief of mind, when they part one from another, with a mournful song and dirges. They are very shamefaced, and very chaste in the manner of their living. For when the man, which we brought from thence into *England* the last voyage, should put off his coat, he would not suffer the woman to be present, but put her forth of his cabin. And in all the space of two or three months, while the man lived in company of the woman, there was never anything seen or perceived between them, more than might have passed between brother and sister. But the woman was in all things very serviceable for the man, attending him carefully when he was sick; and he likewise in all the meats which they did eat together, would carve unto her of the sweetest, fattest, and best morsels they had. They wondered much at all

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our things, and were afraid of our horses and other beasts out of measure. They began to grow more civil, familiar, pleasant, and docible amongst us in very short time.

They have boats made of leather, and covered clean over, saving one place in the middle to sit in, planked within with timber; and they use to row therein with one oar, more swiftly a great deal than we in our boats can do with twenty. They have one sort of greater boats wherein they can carry above twenty persons; and have a mast with a sail thereon, which sail is made of thin skins or bladders, sewed together with the sinews of fishes. They are good fishermen, and in their small boats, being disguised with their coats of seals' skins, they deceive the fish, who take them rather for their fellow seals, than for deceiving men. They are good markmen. With their dart or arrow they will commonly kill a duck, or any other fowl, in the head, and commonly in the eye. When they shoot at a great fish with any of their darts, they use to tie a bladder thereunto, whereby they may the better find them again; and the fish, not able to carry it so easily away, for that the bladder doth buoy the dart, will at length be weary and die therewith. They use to traffic and exchange their commodities with some other people, of whom they have such things as their miserable country, and ignorance of art to make, denieth them to have; as bars of iron, heads of iron for their darts, needles made four-square, certain buttons of copper, which they use to wear upon their foreheads for ornament, as our ladies in the Court of *England* do use great pearl. Also they have made signs unto us, that they have seen gold, and such bright plates of metals, which are used for ornaments amongst some people with whom they have conference. We found also in their tents a Guinea-bean of red colour, the

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which doth usually grow in the hot countries; whereby it appeareth they trade with other nations which dwell far off, or else themselves are great travellers.

They have nothing in use among them to make fire withal, saving a kind of heath and moss which groweth there; and they kindle their fire with continual rubbing and fretting one stick against another, as we do with flints. They draw with dogs in sleds upon the ice, and remove their tents therewithal, wherein they dwell in summer, when they go hunting for their prey and provision against winter. They do sometimes parboil their meat a little and seethe the same in keetles made of beasts' skins; they have also pans cut and made of stone very artificially. They use pretty gins wherewith they take fowl. The women carry their sucking children at their backs, and do feed them with raw flesh, which first they do a little chew in their own mouths. The women have their faces marked or painted over with small blue spots; they have black and long hair on their heads, and trim the same in a decent order. The men have but little hair on their faces, and very thin beards. For their common drink, they eat ice to quench their thirst withal. Their earth yieldeth no grain or fruit of sustenance for man, or, almost for beast, to live upon; and the people will eat grass and shrubs of the ground, even as our kine do.

HAKLUYT: *Principal Navigations. The Third Voyage of Captain Frobisher*, by George Best

THE SEARCH FOR THE NORTH-EAST PASSAGE

[ENGLISH merchants during the sixteenth century were jealous of the rich cargoes that Spanish and

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Portuguese ships were bringing from the Americas and the Indies. The Spaniards barred the way to the West through the Straits of Magellan. The way to the East by the Cape of Good Hope had been opened by the Portuguese Vasco da Gama in 1498 and his countrymen held command of that trade route.

Consequently, English seamen determined to find a north-east passage through the Arctic seas to China and India. In 1553 three vessels sailed away to the north. They were under the command of Sir Hugh Willoughby and Richard Chancellor. Willoughby was compelled to spend the winter on the desolate coast of Lapland and he and all his crew perished there. Chancellor reached the White Sea to the north of Russia and was entertained by the Russian Emperor. He was drowned a few years later on his way back to England, and Englishmen were discouraged from further attempts at exploring these perilous seas. Instead, Frobisher and his companions were busy finding a north-west passage above Canada.

The Dutch, then a great seafaring nation, took over the search for a north-easterly route and between 1594 and 1597 sent out three expeditions under a brilliant navigator named William Barents. On his last voyage he discovered Spitzbergen but his ship was hemmed in by the ice. He and his companions had to spend the winter on the frozen wastes of Nova Zembla—an uninhabited island in the Arctic Seas. Among these gallant voyagers was Gerrit de Vere and to him we owe a day-to-day account of their fearful sufferings from bitter cold, starvation, and disease.

They penetrated further north than any before them. The wooden house they built, in which they spent a long northern winter and Gerrit de Vere wrote down their daily happenings by the light of an

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oil lamp, was still standing when explorers again reached Nova Zembla three hundred years later.]

The 21st of August [1596] we sailed a great way into the Ice Haven, and that night anchored therein : next day, the current going extreme hard eastward, we haled out again from thence, and sailed again to the Island Point ; but for that it was misty weather, coming to a piece of ice, we made the ship fast thereunto, because the wind began to blow hard south-west and south south-west. There we climbed up upon the ice, and wondered much thereat, it was such manner of ice : for on the top it was full of earth, and there we found above 40 eggs, and it was not like other ice, for it was of a perfect azure colour, like to the skies, whereby there grew great contention in words amongst our men, some saying that it was ice, others that it was frozen land.

The 23rd of August we sailed again from the ice south-eastward into the sea, but entered presently into it again, and turned back to the Ice Haven. The next day it blew hard north north-west, and the ice came mightily driving in, whereby we were in a manner compassed about therewith, and withal the wind began more and more to rise, and the ice still drove harder and harder, so that the pin of the tiller and the tiller were broken in pieces, and our boat was stove in between the ship and the ice, we expecting nothing else but that the ship also would be pressed and crushed in pieces with the ice.

The 25th of August the weather began to be better and we thought to sail southward about Nova Zembla, and so westwards to the Straits of Mergates . . . but coming to the Streame Bay, we were forced to go back again, because of the ice which lay so fast thereabouts ; and the same night also it froze, that we could hardly get through there with the little

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wind that we had, the wind then being north.

The 26th of August when we had passed by the Ice Haven the ice began to drive with such force that we were enclosed round about therewith, and yet we sought all the means we could to get out, but it was all in vain. And at that time we had like to have lost three men that were upon the ice to make way for the ship, but as we drew back again, they being nimble, as the ship drew by them one of them caught hold of the beak head, another upon the sheet, and the third upon the main brace that hung out behind, and so by great adventure by the hold that they took they got safe into the ship again, for which they thanked God with all their hearts. . . .

The same day in the evening we got to the west side of the Ice Haven, where we were forced, in great cold, poverty, misery, and grief, to stay all that winter; the wind then being east north-east.

The 27th of August the ice drew round about the ship and yet it was good weather; at which time we went on land, and being there it began to blow south-east with a reasonable gale, and then the ice came with great force before the bow of the ship, and drew the ship up four foot high before, and behind, it seemed as if the keel lay on the ground, so that it seemed that the ship would be overthrown in the place; whereupon they that were in the ship put out the yawl, therewith to save their lives, and withal put out a flag to make a sign to us to come on board; which we perceiving and beholding the ship to be lifted up in that sort, made all the haste we could to get on board, thinking that the ship was burst in pieces, but coming unto it we found it to be in better case than we thought it had been.

The 28th of August, as William Barents and the other pilot went forward to the bow to see how the ship lay and how much it was risen, and while they

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were busy upon their knees and elbows to measure how much it was, the ship burst out of the ice with such a noise and so great a crack that they thought verily that they were all cast away, knowing not how to save themselves.

The 29th of August, the ship lying upright again, we used all the means we could, with iron crowbars and other instruments, to break the flakes of ice that lay one heaped upon the other, but all in vain.

The 30th of August the ice began to drive together one upon the other with greater force than before with a great snow, so that all the whole ship was borne up and squeezed, whereby all that was both about and in it began to crack, so that it seemed to burst in a 100 pieces, which was most fearful both to see and hear, and made all the hair of our heads to rise upright with fear. . . .

The 2nd of September it snowed hard with a north-east wind, and the ship began to rise up higher upon the ice, at which time the ice burst and cracked with great force, so that we were of opinion to carry our yawl on land in that foul weather, with 13 barrels of bread and two small casks of wine to sustain ourselves if need were.

The 5th of September it was fair sunshine weather and very calm . . . we were wholly in fear to lose the ship, it was in so great danger. At which time we took counsel together and carried our old foresail, with powder, lead, pieces, muskets, and other furniture on land, to make a tent (or hut) about our boat that we had driven upon the land; and at that time we carried some bread and wine on land also, with some carpenter's tools, therewith to mend our boat, that it might serve us in time of need.

The 7th of September it was tolerable weather again, but we perceived no opening of the water, but to the contrary we lay hard enclosed with ice,

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and no water at all about the ship, no, not so much as a bucketful. The same day five of our men went on land, but two of them came back again; the other three went forward about 8 miles into the land, and there found a river of sweet water, where also they found great store of wood that had been driven thither, and there they found the footsteps of deer and elks, as they thought, for they were cloven-footed, some greater footed than others, which made them judge them to be so. . . . In the night time two bears came close to our ship side, but we sounded our trumpet and shot at them, but hit them not because it was dark, and they ran away. . . .

The 13th of September it was calm but very misty weather, so that we could do nothing, because it was dangerous for us to go into the land, in regard that we could not see the wild bears; and yet they could smell us, for they smell better than they see.

The 15th of September in the morning, as one of our men held watch, we saw three bears, whereof the one lay still behind a piece of ice and the other two came close to the ship, which we perceiving, made our pieces ready to shoot at them; at which time there stood a tubful of meat upon the ice to freshen, for that close by the ship there was no water; one of the bears went unto it, and put her head into the tub to take out a piece of the beef, but it agreed with her as the sausage did with the dog; for as she was snatching at the beef, she was shot into the head, wherewith she fell down dead and never stirred. There we saw a curious sight. The other bear stood still, and looked upon her fellow as if wondering why she remained so motionless; and when she had stood a good while she smelt her fellow, and perceiving that she lay still and was dead, she ran away, but we took halberts and other arms with us and watched for her coming back. And at

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last she came again toward us, and we prepared ourselves to withstand her, wherewith she rose up upon her hinder feet, thinking to ramp at us; but while she reared herself up, one of our men shot her into the belly, and with that she fell upon her forefeet again, and roaring as loud as she could, ran away. Then we took the dead bear, and ripped her belly open; and taking out her guts we set her upon her forefeet, so that she might freeze as she stood, intending to carry her with us into Holland if we might get our ship loose: and when we had set the bear upon her four feet, we began to make a sled, thereon to draw the wood to the place where we meant to build our house. At that time it froze two fingers thick in the salt water of the sea, and it was exceeding cold, the wind blowing north-east.

The 24th of October. Things standing at this point with us, as the sun (when we might see it best and highest) began to leave us, we used all the speed we could to fetch all things with sleds out of our ship into our house, not only meat and drink but all other necessities; at which time the wind was north. . . .

The 27th of October the wind blew north-east, and it snowed so fast that we could not work without the door. That day our men killed a white fox, which they flayed, and after they had roasted it ate thereof, which tasted like rabbit's flesh. The same day we set up our clock, so that it went and struck the hour. And we hung up a lamp to burn in the night time, wherein we used the fat of the bear, which we melted and burnt in the lamp. . . .

The 7th of November it was dark weather and very still, the wind west; at which time we could hardly discern the day from the night, especially because at that time our clock stood still and by that means we thought that it was not day, when it already

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was day. And our men had not that day been out of bed, and therefore they knew not very well whether the light they saw was the light of the day or of the moon. . . .

The 20th of November it was still 'fair weather, the wind easterly. Then we washed our shirts, but it was so cold that when we had washed and wrung them, they presently froze so stiff (out of the warm water) that, although we lay them by a great fire, the side that lay next the fire thawed, but the other side was hard frozen.

The 11th of December it was fair weather and a bright sky, but very cold, which he that felt not would not believe, for our shoes froze as hard as horns upon our feet, and within they were white frozen, so that we could not wear our shoes, but were forced to make loose clogs or slippers, the upper part being sheepskins, which we put on over three or four pairs of socks, and so went in them to keep our feet warm.

The 25th of December being Christmas Day, it was foul weather with a north-west wind; and yet, though it was very foul weather, we heard the foxes run over our house, wherewith some of our men said it was an ill sign; and while we sat disputing why it should be an ill sign, some of our men made answer that it was an ill sign because we could not take them to put them in the pot or on the spit, for that had been a very good sign for us. . . .

The 27th of January it was fair clear weather, with a south-west wind. Then in the morning we digged a hole in the snow, hard by the house, but it was still so extremely cold that we could not stay long at work, and so we digged by turns every man a little while, and then went to the fire, and another went and supplied his place, till at last we digged seven feet deep, where we went to bury the dead man;

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after that, we made a sort of funeral discourse, read prayers and sang psalms and all went out and buried the man ; which done, we went in and ate the funeral meal. And while we were at meat and discoursed amongst ourselves touching the great quantity of snow that continually fell in that place, we said that if it fell out that our house should be closed up again with snow, we would find the means to climb out at the chimney ; whereupon our skipper went to try if he could climb up through the chimney and so get out, and while he was climbing one of our men went forth of the door to see if the master were out or not, who, standing upon the snow, saw the sun, and called us all out, wherewith we all went forth and saw the sun in his full roundness a little above the horizon. . . .

The 20th of May it was foul weather with a north-east wind, whereby the ice began to come in strongly again. And at noon we spoke unto the master and told him that it was time to make preparation to be gone if the time should ever come when we might get away ; whereunto he made answer that his own life was as dear unto him as any of ours unto us, nevertheless he willed us to make haste to prepare our clothes and other things ready and fit for our voyage, and that in the meantime we should patch and mend them, and that we should stay till the month of May was past, and then make ready the boat and the yawl and all other things fit and convenient for our journey. . . .

The 13th of June it was fair weather. Then the master and the carpenters went to the ship and there made the boat and the yawl ready, so that there rested nothing but only to bring it down to the waterside. The master and those that were with him, seeing that it was open water and a good west wind, came back to the house again, and there he spoke

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unto William Barents (that had been long sick) and showed him that he thought it good to go from thence ; and in the name of God to begin our voyage to sail from Nova Zembla. And William Barents had previously written a small scroll and placed it in a *bandoleer*, and hanged it up in the chimney, showing how he came out of Holland to sail to the Kingdom of China, and what had happened unto us being there on land, with all our crosses, that if any man chanced to come thither, they might know what had happened unto us, how we had fared, and how we had been forced in our extremity to make that house, and had dwelt ten months therein. And for that we were now forced to put to sea in two small open boats and to undertake a dangerous and adventurous voyage in hand. . . . We went to the house, and first drew William Barents upon a sled to the place where our boats lay, and after that we fettered Claes Adrianson, both of them having been long sick. And so committing ourselves to the will and mercy of God, with a west north-west wind and an indifferent open water, we set sail and put to sea. . . .

The 20th of June it was indifferent weather, the wind west, and when the sun was south-east (half-past seven A.M.) Claes Adrianson began to be extremely sick, whereby we perceived that he would not live long, and the chief boatswain came into our yawl and told us in what case he was, and that he could not long continue alive. Whereupon William Barents spoke and said, "Methinks with me it will not last long." And yet we did not judge William Barents to be so sick, for we sat talking one with the other, and spoke of many things, and William Barents looked at my little chart, which I had made of our voyage and we had some discussion about it. At last he lay away the card and spoke unto me, saying, "Gerrit, give me something to drink." And

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he had no sooner drunk but he was taken with so sudden a qualm that he turned his eyes in his head and died presently, and we had no time to call the master out of the other boat to speak unto him. And so he died before Claes Adrianson (who died shortly after him). The death of William Barents put us in no small discomfort, as being the chief guide and only pilot on whom we reposed ourselves, but we could not strive against God, and therefore we must of force be content.

GERRIT DE VERE, 1598, *The Third Voyage Northwarde unto the Kingdoms of Cathaia and China* (trans. William Phillip, 1607)

THE DISCOVERY OF CANADA

[JACQUES CARTIER (1494-1557) is famous for his exploration of Canada and especially of the gulf and river of St. Lawrence. France had played only a minor part in the struggle for the trade of India and the East but French explorers were among those searching for a north-west passage to the Spice Islands. Cartier would be familiar with the cod fisheries which had been discovered by Cabot off the coast of Newfoundland for he was born at St. Malo, the French fishing port. In his first voyage in 1534 he sailed along the coast of Newfoundland, through the Belle Isle Strait to the barren shores of Labrador and explored the west coast of Newfoundland. He crossed from Prince Edward Island to the mainland of Canada and sailed around the mouth of the St. Lawrence, but was unable to make progress along the river because "the tides ran so strong that the vessel only lost way."

In the next year Cartier returned to explore the

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great river for hundreds of miles. The French were to take the lead in colonising this country and, in a few years, Champlain had founded Quebec (1608) and later Montreal.

The extracts which follow are taken from the second and most important of Cartier's voyages, in 1535-1536. In a dedication to Francis I he set down his intentions—"the discovery of the lands in the west formerly unknown to you and to us, lying in the same climates and parallels as your territories and kingdoms. You will learn and hear of their fertility and richness, of the immense number of peoples living there, of their kindness and peacefulness, and likewise, of the richness of the great river [St. Lawrence], which flows through and waters the midst of these lands of yours, which is without comparison the largest river that is known to have ever been since."

He gives vivid descriptions of the fertile river basin with detailed accounts of the animal and vegetable life. He tells of his friendly relations with the Indians and gives an amusing picture of their habit of tobacco-smoking.]

The whole country on both sides of this river [St. Lawrence] up as far as Hochelaga and beyond, is as fine a land and as level as ever one beheld. There are some mountains visible at a considerable distance from the river, and into it several tributaries flow down from these. This land is everywhere covered and overrun with timber of several sorts and also with quantities of vines, except in the neighbourhood of the tribes, who have cleared the land for their village and crops. There are a large number of big stags, does, bears and other animals. We beheld the footprints of a beast with but two legs, and followed his tracks over the sand and mud

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for a long distance. Its paws were more than a palm in size. Furthermore there are many otters, beavers, martens, foxes, wild-cats, hares, rabbits, squirrels, wonderfully large [musk-] rats and other wild beasts. The natives wear the skins of these animals for want of other apparel. There are also great numbers of birds. . . . Again this river [St. Lawrence] . . . is the richest in every kind of fish that any one remembers having ever seen or heard of; for from its mouth to the head of it, you will find in their season the majority of the [known] varieties and species of salt- and fresh-water fish.

In the month of December we received warning that the pestilence had broken out . . . the disease increased daily to such an extent that at one time, out of the three vessels, there were not three men in good health, so that on board one of the ships, there was no-one to go down under the quarter-deck to draw water for himself and the rest. And already several had died, whom from sheer weakness we had to bury beneath the snow; for at that season the ground was frozen and we could not dig into it, so feeble and helpless were we. We were also in great dread of the people of the country, lest they should become aware of our plight and helplessness. And to hide the sickness, our Captain, whom God kept continually in good health, whenever they came near the fort, would go out and meet them with two or three men, either sick or well, whom he ordered to follow him outside. When these were beyond the enclosure he would pretend to try to beat them, and vociferating and throwing sticks at them, would drive them back on board the ships, indicating to the Indians by signs, that he was making all his men work below the decks, some at calking, others at

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baking bread and at other tasks; and that it would not do to have them come and loaf outside. This the Indians believed. And the Captain had the sick men hammer and make a noise inside the ships with sticks and stones, pretending that they were calking. At that time so many were down with the disease, that we had almost lost hope of ever returning to France, when God in His infinite goodness and mercy had pity upon us and made known to us the most excellent remedy against all diseases that ever has been seen or heard of in the whole world.

From the middle of November [1535] until [Saturday] the fifteenth of April [1536], we lay frozen up in the ice, which was more than two fathoms in thickness, while on shore there were more than four feet of snow, so that it was higher than the bulwarks of our ships. This lasted until the date mentioned above, with the result that all our beverages froze in their casks. And all about the decks of the ships, below hatches and above, there was ice to the depth of four finger breadths. And the whole river [St. Lawrence] was frozen where the water was fresh up to beyond Hochelaga. During this period there died the number of twenty-five of the best and most able seamen we had, who all succumbed to the aforesaid malady. And at that time there was little hope of saving more than forty others, while the whole of the rest were ill, except three or four. But God in His Divine Grace had pity upon us, and sent us knowledge of a remedy which cured and healed all.

These people [the Indians] live with almost everything in common, much like the Brazilians. They go clothed in beasts' skins, and rather miserably. In winter they wear leggings and moccasins made of skins, and in summer they go barefoot. They

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maintain the order of marriage except that the men take two or three wives. On the death of their husband the wives never marry again, but wear mourning all their lives by dyeing their faces black with brayed charcoal and grease as thick as the back of a knife-blade; and by this one knows they are widows. . . . Betting, after their fashion, takes place in their wigwams, in which they stake all they own. They are by no means a laborious people and work the soil with short bits of wood about half a sword in length. With these they hoe their corn which they call *ozizy*, in size as large as a pea. Corn of a similar kind grows in considerable quantities in Brazil. They have also a considerable quantity of melons, cucumbers, pumpkins, pease and beans of various colours and unlike our own. Furthermore they have a plant, of which a large supply is collected in summer for the winter's consumption. They hold it in high esteem, though the men alone make use of it in the following manner. After drying it in the sun, they carry it about their necks in a small skin pouch in lieu of a bag together with a hollow bit of stone or wood. Then at frequent intervals they crumble this plant into powder, which they place in one of the openings of the hollow instrument, and laying a live coal on top, suck at the other end to such an extent, that they fill their bodies so full of smoke, that it streams out of their mouths and nostrils as from a chimney. They say it keeps them warm and in good health, and never go about without these things. We made a trial of this smoke. When it is in one's mouth, one would think one had taken powdered pepper, it is so hot. The women of this country work beyond comparison more than the men, both at fishing, which is much followed, as well as at tilling the ground and other tasks. Both the men, women and children are more indifferent

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to the cold than beasts; for in the coldest weather we experienced, and it was extraordinary severe, they would come to our ships every day across the ice and snow, the majority of them almost stark naked, which seems incredible unless one has seen them. While the ice and snow last, they catch a great number of wild animals, such as fawns, stags and bears, hares, martens, foxes, otters and others. Of these they brought us very few; for they are heavy eaters and are niggardly with their provisions. They eat their meat quite raw, merely smoking it, and the same with their fish. From what we have seen and been able to learn of these people, I am of opinion that they could easily be moulded in the way one would wish. May God in His holy mercy turn His countenance towards them. Amen.

H. P. BIGGAR, *The Voyages of Jacques Cartier*

AMUNDSEN FINDS THE NORTH-WEST PASSAGE

[THE North-West Passage was finally traced by Amundsen during a voyage of exploration and scientific research in the years 1903-1907. With his crew of six Norwegians he sailed his yacht, the *Gjøa*, through its narrow channel. Amundsen tells us that, as a boy, his imagination had been captivated by the story of John Franklin, who had proved there was a strip of open sea along the whole of North America. Amundsen set out to navigate this sea and prove whether it was practicable for ships. Three winters were spent in the ice and snow wastes of the Arctic while the explorers studied the life and customs of the Eskimos living at the Magnetic North Pole. "We were suddenly brought face to face with

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a people from the Stone Age: we were abruptly carried back several thousand years in the advance of human progress, to people who as yet knew no other method of procuring fire than by rubbing two pieces of wood together."

In his book *The North West Passage* Amundsen gives an admirable summary of earlier attempts to find the channel and describes the moment when he learned his own voyage had been successful.]

Of problems connected with Arctic research, the navigation of the passage to the north of the American Continent has been by far the most interesting to humanity. More lives and treasure have been sacrificed in its solution than in that of almost any other problem. As there is, however, a whole library concerning the "North West Passage," I shall content myself with brief reference to it rather than weary my readers with a historical essay on the subject. I will confine myself to mentioning those voyages and those explorers whose achievements were of the greatest value in the planning and execution of the *Gjøa* Expedition.

John Davis set sail in the year 1585, with the view of discovering the North West Passage. The result was the discovery of the strait between Greenland and Labrador bearing his name. Bylot and Baffin made a fair start in 1616, circumnavigating Baffin's Bay and defining the situation of Lancaster Strait. Dejnev, a Pole, made his way past the North-eastern part of Asia as far back as 1648, and discovered the strait between that continent and America. But his discovery did not become very widely known, and it was a Dane, Vitus Behring, who was the first to make his way through the same strait in 1728, and who had the real credit of discovering Behring Strait. A good start towards the North West Passage was

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made by these discoveries but much still remained to be done. In 1778, Captain James Cook penetrated northwards through Behring Strait and discovered Icy Cape. After this the problem was allowed to rest for a number of years, until attacked again in 1817 by the able captain of an English whaler, William Scoresby, Junior. He was of opinion that the state of the ice had improved sufficiently to warrant fresh attempts. It was thus that John Ross, a Captain in the English Navy, opened the nineteenth century campaign to conquer the North West Passage. In 1743 the English Government had offered a reward of £20,000 for the solution of the problem and now it renewed its promise.* John Ross left in 1818 with the sailing vessels *Isabella* and *Alexander*, but fortune did not smile on him. He sailed round Baffin's Bay, passed Smith Sound, and then stood off to the south. At the entrance to Lancaster Sound he suddenly turned homewards. He insisted that the Sound did not exist, and that it was merely a bay. The mountains which he thought he sighted at the inner side of this bay he christened the Croker Mountains. As, however, all his officers refuted his assertions, and maintained that there was a channel, Edward Parry, the capable chief officer of Captain Ross, was sent out in the following year. He not only proved the existence of the Sound, but made his way a long distance westwards, wintering with his two ships, the *Hecla* and *Griper*, at Melville Island. This was a giant stride, and the name of Parry must be recorded among the foremost in the history of the North West Passage. John Ross, meanwhile, had not lost heart. In 1829 he again went northwards with the *Victory*, a paddle-steamer. This was the first time a steamer was used in the Arctic Ocean. It is, however, needless to say that with large paddle-boxes it was

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impossible to make much progress in the ice. John Ross passed four winters on the eastern side of Boothia Felix, and was finally compelled to get back in boats, as his vessel was crushed in the ice. Very good results were obtained by this expedition. In later years, his nephew, James Clark Ross, the celebrated Polar explorer, found and determined the position of the Magnetic Pole. "Our knowledge of the geography of these regions was considerably extended, and John Ross regained, in a great measure, his lost reputation. The greater portion of the North American coast was mapped out by means of expeditions in boats, particularly by Franklin in 1819-1822 and 1825-1827. Dease and Simpson continued the work in 1837-1839. The whole of the North American coast was thus, in the main, known, but the North West passage had not yet been discovered.

Franklin left England in 1845 with the *Erebus* and the *Terror* and favourable results were confidently looked for. Franklin had, during his two previous expeditions, shown such signal capacity that success seemed certain. But, as we know too well, these hopes were not to be realised. Not a single man of the 134 members of the Franklin expedition ever returned. The uncertainty of Franklin's fate became, during the following years, a burning question to the whole world, and many relief and search expeditions were sent out. Many of these did good work; but the expeditions of Admiral Sir Richard Collinson and Dr. John Rae, especially, were the most important steps towards the final achievement of the navigation of the North West Passage. Admiral Collinson sailed in 1850, on the *Enterprise*, into Behring Strait and examined the West Coast of Prince Albert Land and Wollaston Land, where he passed the winter. The following year he proceeded through Dolphin and Union Strait into Coronation

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Gulf and onwards through Dease Strait, where he was again compelled to winter, in Cambridge Bay, on the south coast of Victoria Land. His soundings and survey of this narrow and foul channel were very helpful to the *Gjøa* Expedition. 'Sir Richard Collinson appears to me to have been one of the most capable and enterprising sailors the world has ever produced. He guided his great, heavy vessel into waters that hardly afforded sufficient room for the tiny *Gjøa*. But, better still, he brought her safely home. His recompense for the heroism shown was, however, but scant. His second in command, Sir Robert M'Clure, who had had to abandon his vessel, the *Investigator*, in Mercy Bay, on the north-east coast of Banks Land, and who was then helped home by others, received all the honour, and one half of the promised reward went to him and his men as discoverers of the North West Passage. Both of these expeditions were of the greatest importance as a guide to the navigation of the passage. M'Clure had proved that it was impracticable to make the passage by the route he tried. To Collinson belonged the still greater merit of pointing out a really practicable way for vessels—as far as he reached. In other words, M'Clure found a North West Passage which was not navigable; Collinson found one which was practicable, although not suitable for ordinary navigation.

Dr. John Rae was one of the Hudson Bay Company's medical officers. He deserves great credit for his exploration of North Eastern America. His work was of incalculable value to the *Gjøa* Expedition. He discovered Rae Strait, which separates King William Land from the mainland. In all probability the passage through this strait is the only navigable route for the voyage round the North coast of America. This is the only passage which is free from the de-

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structive pack-ice. The distinguished Arctic explorer, Admiral Sir Leopold M'Clintock, pointed out this passage in his report on the *Fox* Expedition in 1857-1859, and proved that if the North West Passage were ever to be accomplished, it would be through this channel. I followed the advice of this experienced sailor and had no reason to regret it.

Precisely at 3 A.M. on August 13th, 1905, the windlass played a lively tune on the deck of the *Gjøa*. The weather was not of the finest—thick fog and a light contrary breeze. We therefore set the motor going full speed ahead when leaving the harbour. The Eskimo had assembled in the early morning on shore to wish us a last “Mannik-tu-mi!” Talurnakto accompanied us out towards Fram Point, and we could hear him calling out his “God-da! God-da!” (Good-day) long after he was lost in the fog.

We jumped, so to speak, right into the same doubtful navigation as before, impenetrable fog, no compass, and a very changeable breeze, which was therefore a poor guide. . . .

We anchored on August 17th, at 5 P.M., on the west side of Cape Colborne, and this was a significant day in the history of our Expedition—for we had now sailed the *Gjøa* through the hitherto unsolved link in the North West Passage. We now felt we had got back again to fairly-known waters, so to speak. A sounding was now and then given on the chart, and we felt much more at ease, knowing that we had waters ahead of us which had been ploughed by a large vessel. . . .

We were compelled to keep southwards to avoid the shoals between the mainland and Douglas Island. The water was now getting deeper. Finding eventually that we had got far enough to the south, we turned off to the west, shaping our course towards the

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point where we expected to find an opening. It was an exciting time. Fortunately the deep water continued—we found nowhere less than seven fathoms—we neared the mainland without trouble, and found the passage all right. At 3 P.M. we passed Liston and Sutton Islands, and stood off into Dolphin and Union Strait. My relief at having thus got clear of the last difficult hole in the North West Passage was indescribable. I cannot deny that I had felt very nervous during the last few days. The thought that here in these troublesome waters we were running the risk of spoiling the whole of our so far successful enterprise was anything but pleasant, but it was always present to my mind. The whole responsibility for crew and the vessel rested on me, and I could not get rid of the possibility of returning home with the task unperformed. . . .

On August 26th, at 4 P.M., we sighted a high land to windward. The air was very misty, and as, according to our reckoning, we should be abreast of Cape Parry, I thought this was that we saw. During the early morning the air became clearer, and I knew then that this land was not Cape Parry on the mainland of America, but Nelson Head on Baring Land. The error was not quite insignificant to be sure. But my misgivings on this head were appeased when told later by American whalers of the ludicrous mistakes they often made in these waters. There is probably a lot of iron in the mountains here, and the compass therefore becomes utterly distracted. Then there are strong currents, and the united influence of these factors may confuse the most conscientious navigator even more than it did when we mistook Nelson Head for Cape Parry. We were, of course, wholly unacquainted with the condition of things. When we had found our bearings, we continued our voyage at full speed, having a fair wind

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as well as the current right behind us.

At 8 A.M. my watch was finished and I turned in. When I had been asleep some time, I became conscious of a rashing to and fro on deck. Clearly there was something the matter, and I felt a bit annoyed that they should go on like that for a matter of a bear or a seal. It must be something of that kind, surely. But then Lieutenant Hansen came rushing down into the cabin and called out the ever memorable words: "Vessel in sight, sir!" He bolted again immediately, and I was alone.

The North West Passage had been accomplished—my dream from childhood. This very moment it was fulfilled. I had a peculiar sensation in my throat; I was somewhat overworked and tired, and I suppose it was weakness on my part, but I could feel tears coming to my eyes. "Vessel in sight!" The words were magical. My home and those dear to me there at once appeared to me as if stretching out their hands—"Vessel in sight!"

ROALD AMUNDSEN, 1908, *The North West Passage*

THE SEARCH FOR A SOUTHERN
CONTINENT

THE VOYAGES OF QUIROS

[PEDRO FERNANDO DE QUIROS, a brilliant navigator and map-maker, was born in Portugal in 1565. He was thirty years of age when he made his first voyage as Chief Pilot to Mendano, who was setting out to colonise the Solomon Islands which he had discovered some years before. The second and most famous voyage was under his own command in 1605-1606, when he discovered the Duff and Banks Islands and the New Hebrides group. During this voyage he formed the opinion that a great southern continent, extending to the South Pole, stretched from the Strait of Magellan to New Guinea. In 1606 he set out from the port of Lima in Peru with two small ships and a launch and a complement of 130 men. His plan was to sail E.S.E. across the Pacific to latitude 30° S. where he expected to reach the new continent. If he had carried out his intentions he would have discovered New Zealand and Australia, but several factors obliged him to alter course to E.N.E.—strong winds and heavy seas, the approach of winter and a mutinous crew which he had to contend with while lying ill in bed. He came across the Duff group of islands and from a native chief received much valuable information of other lands to the southward. Steering south, he discovered many fine islands, all thickly inhabited; these were later named by Captain Cook the New Hebrides. To the south-west he saw the land which he believed was the new continent and he named it Australia

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del Espiritu Santo. Sailing north on the homeward journey, he came across the southern coast of New Guinea and the many islands of the Torres Strait.

Quiros was a deeply religious man and he hoped not only to discover the Antarctic continent but to convert thousands of natives to the Christian religion. He was the last of the great line of Spanish navigators, and when he reached home he spent the rest of his life trying to interest others in his scheme and prove that what he said was true.

The extracts which follow describe some of the islands which Quiros discovered and the processions and rejoicings which were held when he thought he had found his southern continent, and he took possession in the name of the Church and the King of "all this region of the south as far as the Pole."]

The wind increased in force with thick weather, with flights of birds, and the night approaching, so we struck the topmasts and hove to until the 24th of April. On that day the sun was taken, and it was found that we were in 14° , the ship having drifted 20 leagues. In the afternoon, the weather having cleared up, the Captain ordered sail to be made, and when he was asked what the course was to be, he answered: "Put the ship's head where they like, for God will guide them as may be right;" and as it was S.W., he said it might continue so. So on that course, with little sail, we steered during the night. Before sunrise on the following day, a sailor of the *Capitana* named Francisco Rodriguez went to the mast-head, and cried in a cheerful voice: "Very high land ahead!" We all wanted to see it, and all looked at it together with great contentment. Much greater was their satisfaction when they came close, and saw smoke, and natives calling to the launch to come nearer.

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This island was calculated to be 1,700 leagues from Lima. It is 7 or 8 leagues in circumference, forms a round hill, abrupt near the sea, the highest and best-formed I have seen. Its shape is that of a sugar-loaf with the crown cut off. It is cut like a saddle, whence a good deal of water falls into the sea. We saw crops growing, plantains, palms and other trees. The inhabitants appeared to be of a good colour, and well made. The people were on the N.W. side, where, at a short distance from the shore, there is a bare rock. The latitude of this land is 14° , and it was named San Marcos, because it was discovered on that Saint's day.

From this island of San Marcos we went on a S.W. course, with men at the mast-head; and at 10 in the fore-noon, at a distance of 12 leagues to the S.E., a land of many mountains and plains was sighted, the end of which could not be seen throughout the day. The Captain gave it the name of "Margaritana." . . .

About 20 leagues to the west, an island was seen that looked so beautiful that it was determined to go to it.

Next day we arrived near the island and in all directions we saw columns of smoke rising, and at night many fires. In the centre it is rather high, and thence its slopes extend in all directions towards the sea, so that its form is a massive round, with only the part towards the south a little broken with ravines. It is a land of many palm trees, plantains, verdure, abundant water, and thickly inhabited. The circumference is about 50 leagues, though some gave it 100 leagues, and must support about 200,000 inhabitants. Its latitude is $14^{\circ} 30'$. Owing to its great beauty, it was given the name of "Virgen Maria."

Four canoes with unarmed natives came to the

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Almiranta, and made signs to offer to take him into port. Seeing that our people did not wish it, they made presents of cocoa-nuts and other fruits. Having received a good return, they went back to their island.

As the disposition of the natives seemed to be good, the Captain sent a party in the launch and one boat, to examine the coast and find a port. The party was under the command of Pedro Lopez do Sojo. They found to the S. and S.E. clean bottom at 20 fathoms or less, where the ships might well anchor if the weather to be expected was known. They saw a great number of people on the island, who came out to see and call to us. They followed the boat without passing certain boundaries, and by this we supposed that there were partitions of property between people not on good terms. Among them there were two colours. While they were looking at each other, and talking by signs, a man rushed down from some rocks behind. He was well made, of a clear mulatto colour, the hairs of his beard and head brown and crisp, and rather long. He was robust and vigorous. With a jump he got into the boat, and, according to the signs he made, he appeared to ask: "Where do you come from? What do you want? What do you seek?" Assuming that these were the questions, one of our people said, "We come from the east, we are Christians, we see! you, and we want you to be ours." He showed himself to be so bold, that our people understood that he wanted to make us believe that to him we were a small affair. He presently was undeceived, for he was seized and brought to the ship, where he came on board so fearlessly that we had to confess he was no coward. The Captain embraced him, and asked about other land by signs, of which he appeared to give extensive information. . . .

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This day one Melchor de los Reyes was looking out at the mast-head, when, at three in the afternoon, he saw at a distance of 12 leagues to the S.W. and S., more or less, an extensive land. For this, and because the eye could not turn to a point that was not all land, the day was the most joyful and the most celebrated day of the whole voyage. We went on towards the land, and next day found ourselves near a coast running to the west. The name of Cardona was given to this land in memory of the Duke of Sesa, who had taken so deep an interest in the voyage, as well at Rome as at the Court of Spain, and because the Captain felt very grateful.

When we set out for the said land there was seen, far away to the S.E., a massive and very lofty chain of mountains, covered with thick masses of white clouds in the middle and on the heights, while the bases were clear. It seemed from aloft that the coasts of these two lands appeared to form one. The Captain gave the name of "La Clementina" to this range of mountains. It seemed to be in about 17° . . .

On that night all three vessels displayed many lights, and they sent off many rockets and fire-wheels. All the artillery was fired off, and when the natives heard the noise and the echoes resounding over hills and valleys, they raised great shouts. We sounded drums, rang the bells, had music and dancing, and had other forms of rejoicing, in which the men showed great pleasure. The Captain said to all: "Gentlemen, this is the eve of my long-desired day, for which there should be no empty hand nor person for whom the appointed good things are not welcome, and as much more as the part he takes may deserve."

It was not quite dawn when the Camp Master and Ministers, taking with them an armed party in the two boats, went on shore. They landed near

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the launch with four small pieces to be used in a fort. Presently, with joyous diligence a booth made of branches was set up on the beach, surrounded by stakes, to serve as a fort in case of necessity. Within, the monks arranged a clean and well-ordered altar under a canopy. This was the first church, and was named by the Captain "Our Lady of Loreto." Everything having been arranged as well as the time would allow, it was reported to the Captain, and presently he left the ship with the rest of the people. All the three companies were drawn up in good order on the beach.

The Royal Ensign came forth with the standard in his hands. The banners which were fluttering and brightening the whole scene, received their tribute from discharges of muskets and arquebuses. Presently the Captain came out and went down on his knees, saying: "To God alone be the honour and glory." Then putting his hand on the ground, he kissed it, and said: "O Land! sought for so long, intended to be found by many, and so desired by me!" . . .

"I take possession of this bay, named the Bay of St. Philip and St. James, and of its port named Santa Cruz, and of the site on which is to be founded the city of New Jerusalem, in latitude $15^{\circ} 10'$, and of all the lands which I sighted and am going to sight, and of all this region of the south as far as the Pole, which from this day shall be called Australia del Espiritu Santo, with all its dependencies and belongings."

The Voyages of Pedro Fernando de Quiros, 1595-1606
(trans. Sir Clements Markham, 1904, for
Hakluyt Society)

THE SEARCH FOR A SOUTHERN CONTINENT

WILLIAM DAMPIER— BUCCANEER AND ADVENTURER

[DAMPIER'S position in the story of exploration is a disputed one. Some believe that he was "not formed of the stuff of which explorers are made," while others consider him the most important English explorer during the 150 years which lasted from the time of the great Elizabethans until the voyages of Captain Cook. He certainly played a considerable part in the story of Australia and the search for that southern continent of which Quiros was so confident. Dampier's achievements are not spectacular because the Dutch explorer Tasman had anticipated him. Tasman, in 1642, had discovered Tasmania and New Zealand. "It is a very fine country, and we hope it is part of the unknown South Country," he wrote in his *Journal*.

Born in the middle of the seventeenth century, Dampier made his first voyages to Newfoundland and the East Indies before he volunteered, at the age of twenty-one, for the King's navy to fight against the Dutch. In a year or two he was sailing to the West Indies and entering in his famous *Journal* every interesting detail of the voyage. There, in search of riches and excitement, he joined the buccaneers and it was on a pirate ship, under the command of Read, that he first sighted Australia in 1688. After cruising in the Gulf of Siam they sailed south to "terra Australia incognita," in order "to see what that country would afford us." Their first impressions were of a barren land and dull-witted natives who "grinned like so many monkeys." After a stay of several weeks they sailed to Sumatra and the Nicobar Islands where Dampier deserted from his pirate crew.

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When he returned to England he decided to publish the famous *Journal* of his travels, and the first of his books, *A New Voyage*, appeared in 1697. It was immensely popular, and Dampier became famous. Evelyn writes in his *Diary* for 1698: "I dined with Mr. Pepys, where was Captain Dampier, who had been a famous buccaneer . . . and printed a relation of his very strange adventures and his observations. . . . He was now going abroad again by the King's encouragement." This was the voyage of H.M.S. *Roebeuck*. Dampier sailed from London in 1699 and, nearly eight months later, anchored in the bay now named after him on the west coast of Australia. The voyage was an ill-fated one. There was continual trouble with the crew (Dampier seems to have been a poor leader of men) and a lack of water and fresh food, so that his original intention of sailing round the continent had to be abandoned and he contented himself by coasting along the north-western shores, making interesting observations, before sailing to explore New Guinea. Further exploration of Australia had to wait another seventy years until the time of Cook.

Dampier's thirst for adventure led him to many strange places; three times he sailed round the world. His curiosity and continual search for more knowledge is well reflected in his fascinating travel-books.]

It was the 7th of August when we came into Shark's Bay, in which we anchored at three several places, and stayed at the first of them (on the west side of the bay), till the 11th. During which time we searched about, as I said, for fresh water, digging wells but to no purpose. However, we cut good store of firewood at this first anchoring place, and my company were all here very well refreshed with

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raccoons, turtle, shark, and other fish, and some fowls; so that we were now all much brisker than when we came in hither. Yet still I was for standing farther into the bay, partly because I had a mind to increase my stock of fresh water, which was began to be low, and partly for the sake of discovering this part of the coast. So on the 11th, about noon, I steer'd farther in, with an easy sail, because we had but shallow water: we kept therefore good looking out for fear of shoals. . . .

On the 12th, in the morning, we pass'd by the N. point of that land, and were confirmed in the persuasion of its being an island, by seeing an opening to the east of it, as we had done on the W. Having fair weather, a small gale, and smooth water, we stood further on in the bay, to see what land was on the E. of it. Our soundings at first were seven fathom, which held so a great while, but at length it decreas'd to six. Then we saw the land right a-head, that in the plan makes the E. of the bay. We could not come near it with the ship, having but shoal water; and it being dangerous lying there, and the land extraordinary low, very unlikely to have fresh water (though it had a few trees on it, seemingly mangroves), and much of it probably covered at high water, I stood out again in that afternoon, deepening the water, and before night anchored in eight fathom, clean white sand, about the middle of the bay.

The next day we got up our anchor, and that afternoon came to an anchor once more near two islands, and a shoal of coral rocks that face the bay. Here I scrubb'd my ship.

The day before we came out I sent a boat ashore to the most northerly of the two islands, catching many small fish in the meanwhile with hook and line. The boat's crew returning, told me that the

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isle produces nothing but a sort of green, short, hard, prickly grass, affording neither wood nor fresh water; and that a sea broke between the two islands, a sign that the water was shallow. They saw a large turtle, and many skates and thornbacks, but caught none.

It was August the 14th, when I sailed out of the Bay or Sound, the mouth of which lies, as I said, in 25° 5' designing to coast along to the N.E. till I might commodiously put in at some other part of N. Holland. In passing out we saw three water-serpents swimming about in the sea, of a yellow colour, spotted with dark brown spots. They were each about four foot long, and, about the bigness of a man's wrist, and were the first I saw on this coast which abounds with several sorts of them. . . . We had in the night abundance of whales about ship, some ahead, others astern, and some on each side blowing and making a very dismal noise; but when we came out again into deeper water they left us. Indeed, the noise they made by blowing and dashing of the sea with their tails, making it all of a breach and foam, was very dreadful to us, like the breach of the waves in very shoal-water, or among rocks. . . . The 21st day, also, we had small land-breezes in the night and sea-breezes in the day: and as we saw some sea-snakes every day, so this day we saw a great many, of two different sorts or shapes. One sort was yellow, and about the bigness of a man's wrist, about four foot long, having a flat tail about four fingers broad. The other sort was much smaller and shorter, round and spotted, black and yellow. This day we sounded several times, and had forty-five fathom, sand. We did not make the land till noon, and then saw it first from our top-mast head. It bore S.E. by E. about nine leagues distance, and it appeared like a cape or head of land. . . . There

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were three or four rocky islands about a league from us, and we saw many other islands both to the east and west, as far as we could see either way from our top-mast head. . . . The large islands were pretty high; but all appeared dry, and mostly rocky and barren. The rocks looked of a rusty yellow colour and therefore I despaired of getting water on any of them; but was in some hopes of finding a channel to run in beyond all these islands, could I have spent time here, and either get to the main of New Holland, or find out some other islands that might afford us water and some other refreshments: besides, that among so many islands, we might have found some sort of rich mineral, or amber-greece, it being a good latitude for both of these. . . . We rode a league from the island, and I presently went ashore, and carried shovels to dig for water, but found none. There grew here two or three sorts of shrubs, one just like rosemary; and therefore I called this Rosemary Island. It grew in great plenty here, but had no smell. Some of the other shrubs had blue and yellow flowers; and we found two sorts of grain like beans: the one grew on bushes; the other on a sort of creeping vine that runs along on the ground, having very thick broad leaves, and the blossom like a bean blossom, but much larger, and of a deep red colour, looking very beautiful. We saw here some Cormorants, Gulls, Crab-catchers, etc., a few small land birds, and a sort of white parrots, a great many together. We found some shell-fish, viz. limpets, perriwinkles, and abundance of small oysters growing on the rocks, which were very sweet. In the sea we saw some green turtle, a pretty many sharks, and abundance of water snakes of several sorts and sizes. The stones were all of rusty colour and ponderous.

We saw a smoak on an island three or four leagues

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off; and there also the bushes had been burned, but we found no other sign of habitation: 'twas probable that on the island where the smoak was there was inhabitants, and fresh water, for them. . . .

The 30th day, being in latitude $18^{\circ} 21'$, we made the land again, and saw many great smoaks near the shore; and having fair weather and moderate breezes, I steered in towards it.

The 31st of August betimes in the morning, I went ashore with ten or eleven men to search for water. We went armed with muskets and cutlasses for our defence, expecting to see people there; and carried also shovels and pickaxes to dig wells. When we came near the shore we saw three tall black naked men on the sandy bay ahead of us: but as we rowed in, they went away. When we were landed, I sent the boat with two men in her to lie a little from the shore at an anchor, to prevent being seized; while the rest of us went after the three black men, who were now got on the top of a small hill, about a quarter of a mile from us, with eight or nine men more in their company. They seeing us coming, ran away. When we came on the top of the hill where they first stood, we saw a plain savannah, about half a mile from us, farther in from the sea. There were several things like hay cocks, standing in the savannah; which at a distance we thought were houses, looking just like the Hottentots' houses at the Cape of Good Hope: but we found them to be so many rocks. We searched about these for water, but could find none, nor any houses; nor people, for they were all gone. Then we turned again to the place where we landed, and there we dug for water.

While we were at work, there came nine or ten of the natives to a small hill a little way from us, and stood there menacing and threatening of us, and making a great noise. At last one of them came

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towards us, and the rest followed at a distance. I went out to meet him, and came within fifty yards of him, making to him all the signs of peace and friendship I could; but then he ran away, neither would they any of them stay for us to come nigh them, for we tried two or three times. At last I took two men with me, and went in the afternoon along by the sea side purposely to catch one of them, if I could, of whom I might learn where they got their fresh water. There were ten or twelve of the natives a little way off, who seeing us three going away from the rest of our men, followed us at a distance. I thought they would follow us; but there being for a while a sandbank between us and them, that they could not then see us, we made a halt, and hid ourselves in a bending of the sandbank. They knew we must be thereabouts, and being three or four times our number, thought to seize us. We knew that we could easily outrun them; so a nimble young man that was with me, seeing some of them near, ran towards them, and they for some time ran away before him. But he soon overtaking them, they faced about and fought him. He had a cutlass and they had wooden lances, with which, being many of them, they were too hard for him. One of them threw a lance at me, that narrowly missed me. I discharged my gun to scare them but avoided shooting any of them; till finding the young man in great danger from them, and myself in some; and that tho' the gun had a little frightened them at first, yet they had soon learnt to despise it, tossing up their heads and crying "Pooh, pooh, pooh," and coming on afresh with a great noise; I thought it high time to charge again and shoot one of them, which I did. The rest seeing him fall made a stand again, and my young man took the opportunity to disengage himself and come off to me. . . . They took up their

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wounded companion, and my young man, who had been struck through the cheek by one of their lances, was afraid it had been poisoned, but I did not think this likely. His wound was very painful to him, being made with a blunt weapon; but he soon recovered of it.

Among the N. Hollanders whom we were thus engaged with there was one who by his appearance and carriage, seemed to be the chief of them, and a kind of prince or captain among them. He was a young brisk man, not very tall, nor so personable as some of the rest, tho' more active and courageous: he was painted (which none of the rest were at all) with a circle of white paste or pigment (a sort of lime, as we thought) about his eyes and a white streak down his nose from his forehead to the tip of it. . . . All of them have the most unpleasant looks and the worst features of any people that ever I saw.

We saw a great many places where they had made fires. . . . By their fireplaces we should always find great heaps of fish shells of several sorts; and 'tis probable that these poor creatures here lived chiefly on the shell-fish. . . .

Next morning my men came aboard and brought a rundlet of brackish water, which they got out of another well that they dug in a place a mile off, and about half as far from the shore; but this water was not fit to drink.

The land hereabouts was much like the part of New Holland that I formerly described; 'tis low, but seemingly barricado'd with a long chain of sandhills to the sea, that lets nothing be seen of what is farther within land. . . . The land by the sea for about five or six hundred yards is a dry sandy soil, bearing only shrubs and bushes of divers sorts. Some of these had them at this time of the year,

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yellow flowers or blossoms, some blue and some white, most of them of a very fragrant smell. Some had fruit-like peascods, in each of which there were just ten small peas: I opened many of them, and found no more nor less.

The land farther in, that is lower than what borders on the sea, was, so much as we saw of it, very plain and even, partly savannahs, and partly woodland. The savannahs bear a sort of thin coarse grass. The mould is also a coarser sand than that by the sea side, and in some places 'tis clay. Here are a great many rocks which are five or six foot high, and round at the top like a haycock, very remarkable, some red and some white. The woodland lies farther in still, where there were divers sorts of small trees, scarce any three foot in circumference; their bodies twelve or fourteen foot high, with a head of small boughs. By the sides of the creeks, especially nigh the sea, there grow a few small black mangrove trees.

There are but few land animals. I saw some lizards, and my men saw two or three beasts like hungry wolves, lean like so many skeletons, being nothing but skin and bones. We saw a racoon or two, and one small speckled snake.

The land fowls that we saw here were crows (just such as ours in England), small hawks, and kites, a few of each sort; but here are plenty of small turtle-doves, that are plump, fat, and very good meat.

The sea is plentifully stock'd with the largest whales that I ever saw, but not to compare with the vast ones of the northern seas.

And thus, having ranged about a considerable time upon this coast, without finding any good fresh water or any convenient place to clean the ship, as I had hoped for; and it being, moreover, the height of the dry season, and my men growing scorbutic for

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want of refreshments, so that I had little encouragement to search further; I resolved to leave this coast, and accordingly in the beginning of September set sail towards Timor. " "

WILLIAM DAMPIER, *A Voyage to New Holland
in the Year 1699*

CAPTAIN COOK'S FIRST VOYAGE

[CAPTAIN COOK has been rightly described as Great Britain's most distinguished navigator. In 1768 he was commissioned by the Government to sail to the Central Pacific to observe an eclipse of the sun. With him, in the *Endeavour*, was Joseph Banks, the great botanist. Afterwards they sailed on to continue the explorations of the great Dutch explorer Tasman, for it was still not known whether Australia was joined to New Guinea in the north and to Tasmania in the south.

For six months Cook surveyed New Zealand and wrote, "It does not appear to me at all difficult for strangers to form a settlement." He proved that the two islands were not joined to a southern continent and then sailed west to Australia. He followed the coast for some days and landed in Botany Bay, where he tried to get in touch with the natives. Continuing his voyage the *Endeavour* was spiked on a coral reef. It was beached and Cook found that the rock had broken off in the ship and plugged the hole. While the men were working on the ship they observed "an animal as large as a greyhound, of a mouse colour, and very swift, which went only upon two legs, making vast bounds"—the first account of the kangaroo.

Sailing to Java and Batavia and from there to

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Cape Town, Cook returned to England in July 1771, having sailed round the world. He was to make two famous voyages of discovery to Australia and the Pacific. On his third expedition he discovered Hawaii, where he was killed in a skirmish with the natives.

The following narrative is taken from Captain Cook's own *Journal* of his first voyage and describes his landing at Botany Bay.]

Tuesday, May 1st.—Gentle breezes, Northerly. In the P.M. 10 of the natives again visited the watering place. I, being on board at this time, went immediately ashore, but before I got there they were going away. I followed them alone and unarmed some distance along shore, but they would not stop until they got farther off than I chose to trust myself. These were armed in the same manner as those that came yesterday. In the evening I sent some hands to haul the Saine, but they caught but a very few fish. A little after sunrise I found the variation to be $11^{\circ} 3'$ E. Last night Forley Sutherland, Seaman, departed this life, and in the A.M. his body was buried ashore at the watering place, which occasioned my calling the south point of this bay after his name. This morning a party of us went ashore to some huts, not far from the watering place, where some of the natives are daily seen; here we left several articles, such as cloth, looking glasses, combs, beads, nails, etc.; after this we made an excursion into the country, which we found diversified with woods, lawns and marshes. The woods are free from underwood of every kind and the trees are at such a distance from one another that the whole country, or at least great part of it, might be cultivated without being obliged to cut down a single tree. We found the soil everywhere, except in the marshes, to be a light

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white sand, and produceth a quantity of good grass, which grows in little tufts about as big as one can hold in one's hand, and pretty close to one another; in this manner the surface of the ground is coated. In the woods between the trees Dr. Solander had a bare sight of a small animal something like a rabbit, and we found the dung of an animal which must feed upon grass, and which, we judge, could not be less than a deer; we also saw the track of a dog or some such like animal. We met with some huts and places where the natives had been, and at our first setting out one of them was seen; the others, I suppose, had fled upon our approach. I saw some trees that had been cut down by the natives with some sort of a blunt instrument, and several trees that were barqued--the bark of which had been cut by the same instrument; in many of the trees, especially the palms, were cut steps of about 3 or 4 feet asunder for the conveniency of climbing them. We found 2 sorts of gum, one sort of which is like gum dragon, and is the same, I suppose, as Tasman took for gum lac; it is extracted from the largest tree in the woods.

Wednesday, 2nd.—Between 3 and 4 in the P.M. we returned out of the country, and after dinner went ashore to the watering place, where we had not been long before 17 or 18 of the natives appeared in sight. In the morning I had sent Mr. Gore, with a boat, up to the head of the bay to drudge for oysters; in his return to the ship he and another person came by land and met with these people, who followed him at the distance of 10 or 20 yards. Whenever Mr. Gore made a stand and faced them they stood also, and notwithstanding they were all armed they never offered to attack him; but after he had parted from them and they were met by Dr. Monkhouse and one or two more, who, upon making a sham

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retreat, they throw'd 3 darts after them, after which they began to retire. Dr. Solander, I, and Tupia made all the haste we could after them, but could not, either by words or actions prevail upon them to come near us. Mr. Gore saw some up the bay, who by signs invited him ashore, which he prudently declined. In the A.M. had the wind in the S.E. with rain, which prevented me from making an excursion up the head of the bay as I intended.

Thursday, 3rd.—Winds at S.E., a gentle breeze and fair weather. In the P.M. I made a little excursion along the sea coast to the southward, accompanied by Mr. Banks and Dr. Solander. At our first entering the woods we saw 3 of the natives, who made off as soon as they saw us; more of them were seen by others of our people, who likewise made off as soon as they found they were discovered. In the A.M. I went in the pinnace to the head of the bay, accompanied by Drs. Solander and Monkhouse, in order to examine the country and to try to form some connections with the natives. In our way thither we met with 10 or 12 of them fishing, each in a small canoe, who retired into shoal water upon our approach. Others again we saw at the first place we landed at, who took to their canoes and fled before we came near them; after this we took water, and went almost to the head of the inlet, where we landed and travelled some distance inland. We found the face of the country much the same as I have before described, but the land much richer; for instead of sand I found in many places a deep black soil, which we thought was capable of producing any kind of grain. At present it produceth, besides Timber, as fine meadow as ever was seen; however, we found it not all like this, some few places were very rocky, but this, I believe, to be uncommon. The stone is sandy and very proper for building, etc. After we

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had sufficiently examined this part we returned to the boat, and seeing some smoke and canoes at another part we went thither, in hopes of meeting with the people, but they made off as we approached. There were 6 canoes and 6 small fires near the shore, and mussels roasting upon them, and a few oysters lying near; from this we conjectured that there had been just 6 people, who had been out each in his canoe picking up the shell fish, and came ashore to eat them, where each had made his fire to dress them by. We tasted of their cheer, and left them in return strings of beads, etc. The day being now far spent, we set out on our return to the ship.

Friday, 4th.—Winds northerly, severe weather. Upon my return to the ship in the evening I found that none of the natives had appeared near the watering place, but about 20 of them had been fishing in their canoes at no great distance from us. In the A.M., as the wind would not allow us to sail, I sent out some parties into the country to try to form some connections with the natives. One of the midshipmen met with a very old man and a woman and 2 small children; they were close to the water side; where several more were in their canoes gathering of shell fish, and he, being alone, was afraid to make any stay with the 2 old people lest he should be discovered by those in the canoes. He gave them a bird he had shot, which they would not touch; neither did they speak one word, but seemed to be much frightened. They were quite naked; even the woman had nothing to cover her. Dr. Monkhouse and another man being in the woods, not far from the watering place, discovered 6 more of the natives, who at first seemed to wait his coming; but as he was going up to them he had a dart thrown at him out of a tree, which narrowly escaped him. As soon as the fellow had thrown the dart he descended the

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tree and made off, and with him all the rest, and these were all that were met with in the course of this day.

Saturday, 5th.—In the P.M. I went with a party of men over to the north shore, and while some hands were hauling the sean, a party of us made an excursion of 3 or 4 miles into the country, or rather along the sea coast. We met with nothing remarkable; great part of the country for some distance inland from the sea coast is mostly a barren heath, diversified with marshes and morasses. Upon our return to the boat we found they had caught a great number of small fish, which the sailors call leather jackets on account of their having a very thick skin; they are known in the West Indies. I had sent the yawl in the morning to fish for sting rays, who returned in the evening with upwards of four hundred weight; one single one weighed 240 lbs exclusive of the entrails. In the A.M., as the wind continued northerly, I sent the yawl again afishing and I went with a party of men into the country, but met with nothing extraordinary.

Sunday, 6th.—In the evening the yawl returned from fishing, having caught 2 sting rays weighing near 600 lbs. The great quantity of plants Mr. Banks and Dr. Solander found in this place occasioned my giving it the name of Botany Bay. It is situated in the Lat. of $34^{\circ} 0'$ S., Long. $208^{\circ} 37'$ W. It is capacious, safe, and commodious; it may be known by the land on the sea coast, which is of a pretty even and moderate height, rather higher than it is inland, with steep rocky cliffs near the sea, and looks like a long island lying close under the shore. The entrance of the bay lies about the middle of this land. . . .

The country is woody, low, and flat as far in as we could see, and I believe that the soil is in general

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sandy. In the wood are a variety of very beautiful birds, such as cocatoos, lorryquets, parrots, etc., and crows exactly like those we have in England. Water fowl is no less plenty about the head of the harbour, where there are large flats of sand and mud, on which they seek their food; the most of these were unknown to us, one sort especially, which was black and white, and as large as a goose, but most like a pelican. On the sand and mud banks are oysters, mussels, cockles, etc., which I believe are the chief support of the inhabitants, who go into shoald water with their little canoes and peck them out of the sand and mud with their hands, and sometimes roast and eat them in the canoe, having often a fire for that purpose, as I suppose, for I know no other it can be for. The natives do not appear to be numerous, neither do they seem to live in large bodies, but dispersed in small parties along by the water side. Those I saw were about as tall as Europeans, of a very dark brown colour, but not black, nor had they wholly, frizled hair, but black and lank like ours. No sort of clothing or ornaments were ever seen by any of us upon any one of them or in or about any of their huts; from which I conclude that they never wear any. Some that we saw had their faces and bodies painted with a sort of white paint or pigment. Although I have said that shell fish is their chief support, yet they catch other sorts of fish, some of which we found roasting on the fire the first time we landed; some of these they strike with gigs, and others they catch with hook and line; we have seen them strike fish with gigs, and hooks and lines are found in their huts. Sting rays, I think, they do not eat, because I never saw the least remains of one near any of their huts or fire places.

However, we could know but very little of their

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customs, as we never were able to form any connections with them; they had not so much as touched the things we had left in their huts on purpose for them to take away. During our stay in this harbour I caused the English colours to be displayed ashore every day, and an inscription to be cut out upon one of the trees near the watering place, setting forth the ship's name, date, etc. Having seen everything this place afforded, we, at daylight in the morning, weighed with a light breeze at N.W., and put to sea.

CAPTAIN COOK, *Journal of his First Voyage*

3600 MILES IN AN OPEN BOAT

[DURING the eighteenth century many voyages to the South Seas were made by order of the British Government, with the object of new discoveries and the advancement of science, particularly of natural history and geography. In 1787, some years after Captain Cook's first voyage, the *Bounty* sailed from England to fetch bread-fruit from the South Seas for introduction to the West Indies. After a long and difficult voyage, the plants were taken on board at Otaheite and the ship sailed. A few hours later mutiny broke out, probably a result of the brutal discipline of the commander.—Lieutenant Bligh. He, with eighteen members of his crew, was forced into a small boat with a few provisions and a quantity of water. From there began an extraordinary and unparalleled voyage of nearly 4000 miles. Under the leadership of Bligh, and thanks to his consummate skill as a sailor and navigator, the crowded boat reached the coast of Timor, after six weeks of misery, privation, and constant danger. Although not strictly a voyage of exploration, Bligh's

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Journal describes "a voyage of the most extraordinary nature that ever happened in the world, let it be taken either in its extent, duration, or the want of every necessary of life."

There was another remarkable outcome of this ill-fated expedition of the *Bounty*. It relates to the mutineers of whom nothing was heard for nearly twenty years and tells a strange story of colonisation in the isolated and storm-swept island of Pitcairn.

The first extracts are taken from Captain Bligh's own *Journal* and relate some of the hazards against which he had to contend.

In a letter to the Admiralty in 1814, from the captain of a British frigate, the *Briton*, came the story of Pitcairn Island.]

The men now entreated their commander to take them towards home ; and on being told that no hope of relief could be entertained till they reached Timor, a distance of full twelve hundred leagues, they all readily agreed to be content with an allowance, which, on calculation of their resources, the commander informed them would not exceed one ounce of bread, and a quarter of a pint of water, per day. Recommending them, therefore, in the most solemn manner, not to depart from their promise in this respect, "we bore away," says Bligh, "across a sea where the navigation is but little known, in a small boat twenty-three feet long from stem to stern, deeply laden with eighteen men. I was, happy, however, to see that every one seemed better satisfied with our situation than myself. It was about eight o'clock at night on the 2nd May, when we bore away under a reefed lug-foresail ; and having divided the people into watches, and got the boat into a little order, we returned thanks to God for our miraculous preservation ; and, in full confidence

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of His gracious support, I found my mind more at ease than it had been for some time past."

At day-break on the 3rd, the forlorn and almost hopeless navigators saw with alarm the sun to rise fiery and red,—a sure indication of a severe gale of wind; and, accordingly, at eight o'clock it blew a violent storm, and the sea ran so very high that the sun was becalmed when between the seas, and too much to have set when on top of the sea; yet it is stated that they could not venture to take it in, as they were in very imminent danger and distress, the sea curling over the stern of the boat, and obliging them to bale with all their might. "A situation," observes the commander, "more distressing has, perhaps, seldom been experienced."

The bread, being in bags, was in the greatest danger of being spoiled by the wet, the consequence of which if not prevented, must have been fatal, as the whole party would inevitably be starved to death, if they should fortunately escape the fury of the waves. It was determined, therefore, that all superfluous clothes, with some rope and spare sails, should be thrown overboard, by which the boat was considerably lightened. The carpenter's tool-chest was cleared, and the tools stowed in the bottom of the boat, and the bread secured in the chest. All the people being thoroughly wet and cold, a tea-spoonful of rum was served out to each person, with a quarter of a bread-fruit, which is stated to have been scarcely eatable, for dinner; Bligh having determined to preserve sacredly, and at the peril of his life, the engagement they entered into, and to make their small stock of provisions last eight weeks, let the daily proportion be ever so small.

The sea continuing to run even higher than in the morning, the fatigue of baling became very great; the boat was necessarily kept before the sea.

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The men were constantly wet, the night very cold, and at daylight their limbs were so benumbed, that they could scarcely find the use of them. At this time a tea-spoonful of rum served out to each person was found of great benefit to all. Five small coconuts were distributed for dinner, and every one was satisfied; and in the evening, a few broken pieces of bread-fruit were served for supper, after which prayers were performed.

On the night of the 4th and morning of the 5th the gale had abated: the first step to be taken was to examine the state of the bread, a great part of which was found to be damaged and rotten—but even this was carefully preserved for use. The boat was now running among some islands, but, after their reception at Tofoa, they did not venture to land. On the 6th, they still continued to see islands at a distance; and this day, for the first time, they hooked a fish, to their great joy; “but,” says the commander, “we were miserably disappointed by its being lost in trying to get it into the boat.” In the evening each person had an ounce of the damaged bread, and a quarter of a pint of water, for supper.

Lieutenant Bligh observes, “It will readily be supposed our lodgings were very miserable, and confined for want of room;” but he endeavoured to remedy the latter defect, by putting themselves at watch and watch; so that one-half always sat up, while the other lay down on the boat’s bottom or upon a chest, but with nothing to cover them except the heavens. Their limbs, he says, were dreadfully cramped, for they could not stretch them out; and the nights were so cold, and they were so constantly wet, that, after a few hours’ sleep, they were scarcely able to move. At dawn on the 7th, being very wet and cold, he says, “I served a spoonful of rum and a morsel of bread for breakfast.”

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In the course of this day they passed close to some rocky isles, from which two large sailing-canoes came swiftly after them, but in the afternoon gave over the chase. They were of the same construction as those of the Friendly Islands, and the land seen for the last two days was supposed to be the Fejee Islands. But being constantly wet, Bligh says, "It is with the utmost difficulty I can open a book to write; and I feel truly sensible I can do no more than point out where these lands are to be found, and give some idea of their extent." Heavy rain came on in the afternoon, when every person in the boat did his utmost to catch some water, and thus succeeded in increasing their stock to thirty-four gallons, besides quenching their thirst for the first time they had been able to do so since they had been at sea. . . .

On the 8th, the allowance issued was an ounce and a half of pork, a tea-spoonful of rum, half a pint of cocoa-nut milk, and an ounce of bread. The rum, though so small in quantity, is stated to have been of the greatest service. In the afternoon they were employed in cleaning out the boat, which occupied them until sunset before they got everything dry and in order. "Hitherto," Bligh says, "I had issued the allowance by guess; but I now made a pair of scales with two cocoa-nut shells; and having accidentally some pistol balls in the boat, twenty-five of which weighed one pound or sixteen ounces, I adopted one of these balls as the proportion of weight that each person should receive of bread at the times I served it. I also amused all hands with describing the situations of New Guinea and New Holland, and gave them every information in my power, that in case any accident should happen to me, those who survived might have some idea of what they were about, and be able to find their way

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to Timor, which at présent they knew nothing of more than the name, and some not even that. At night I served a quarter of a pint of water and half an ounce of bread for supper."

On the morning of the 9th, a quarter of a pint of cocoa-nut milk and some of the decayed bread were served for breakfast; and for dinner, the kernels of four cocoa-nuts, with the remainder of the rotten bread, which, he says, was eatable only by such distressed people as themselves. A storm of thunder and lightning gave them about twenty gallons of water. "Being miserably wet and cold, I served to the people a tea-spoonful of rum each, to enable them to bear with their distressing situation. The weather continued extremely bad, and the wind increased; we spent a very miserable night, without sleep, except such as could be got in the midst of rain."

The morning of the 11th did not improve. "At day-break I served to every person a tea-spoonful of rum, our limbs being so much cramped that we could scarcely move them. Our situation was now extremely dangerous, the sea frequently running over our stern, which kept us baling with all our strength. At noon the sun appeared, which gave us as much pleasure as is felt when it shows itself on a winter's day in England.

"In the evening of the 12th it still rained hard, and we again experienced a dreadful night. At length the day came, and showed a miserable set of beings, full of wants, without anything to relieve them. Some complained of great pain in their bowels, and every one of having almost lost the use of his limbs. The little sleep we got was in no way refreshing, as we were constantly covered with the sea and rain. The weather continuing, and no sun affording the least prospect of getting our clothes dried, I recommended to every one to strip and ring

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them through the sea-water, by which means they received a warmth that, while wet with rain-water, they would not have." The shipping of seas and constant baling continued; and though the men were shivering with wet and cold, the commander was under the necessity of informing them, that he could no longer afford them the comfort they had derived from the tea-spoonful of rum.

On the 13th and 14th the stormy weather and heavy sea continued unabated; and on these days they saw distant land, and passed several islands. The sight of these islands, it may well be supposed, served only to increase the misery of their situation. They were as men, very little better than starving with plenty in their view; yet, to attempt procuring any relief was considered to be attended with so much danger, that the prolongation of life, even in the midst of misery, was thought preferable, while there remained hopes of being able to surmount their hardships.

The whole day and night of the 15th were still rainy; not a star was to be seen by which the steerage could be directed, and the sea was continually breaking over the boat. On the next day, the 16th, was issued for dinner an ounce of salt pork, in addition to their miserable allowance of one twenty-fifth part of a pound of bread. The night was again truly horrible, with storms of thunder, lightning, and rain; not a star visible, so that the steerage was quite uncertain.

On the morning of the 17th, at dawn of day, "I found," says the commander, "every person complaining, and some of them solicited extra allowance, which I positively refused. Our situation was miserable; always wet, and suffering extreme cold in the night, without the least shelter from the weather. The little rum we had was of the greatest service:

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when our nights were particularly distressing, I generally served a tea-spoonful or two to each person, and it was always joyful tidings when they heard of my intentions. The night was again a dark and dismal one, the sea constantly breaking over us, and nothing but the wind and waves to direct our steerage. It was my intention, if possible, to make the coast of New-Holland to the southward of Endeavour Straits, being sensible that it was necessary to preserve such a situation as would make a southerly wind a fair one; that we might range along the reefs till an opening should be found into smooth water, and we the sooner be able to pick up some refreshments."

On the 18th the rain abated, when, at their commander's recommendation, they all stripped, and wrung their clothes through the sea-water, from which, as usual, they derived much warmth and refreshment; but every one complained of violent pains in their bones. At night the heavy rain recommenced, with severe lightning, which obliged them to keep baling without intermission. The same weather continued through the 19th and 20th; the rain constant—at times a deluge—the men always baling; the commander, too, found it necessary to issue for dinner only half an ounce of pork.

Lieutenant Bligh states that some of his people seemed half dead; that their appearances were horrible; "and I could look," says he, "no way, but I caught the eye of some one in distress. Extreme hunger was now too evident; but no one suffered from thirst, nor had we much inclination to drink, that desire perhaps being satisfied through the skin. The little sleep we got was in the midst of water, and we constantly awoke with severe cramps and pains in our bones. At noon the sun broke out and revived every one."

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“During the whole of the afternoon of the 21st we were so covered with rain and salt water, that we could scarcely see. We suffered extreme cold, and every one dreaded the approach of night. Sleep, though we longed for it, afforded no comfort; for my own part, I almost lived without it. On the 22nd our situation was extremely calamitous. We were obliged to take the course of the sea, running right before it, and watching with the utmost care, as the least error in the helm would in a moment have been our destruction. It continued through the day to blow hard, and the foam of the sea kept running over our stern and quarters.

“The misery we suffered this night exceeded the preceding. The sea flew over us with great force, and kept us baling with horror and anxiety. At dawn of day I found every one in a most distressed condition, and I began to fear that another such night would put an end to the lives of several, who seemed no longer able to support their sufferings. I served an allowance of *two* tea-spoonfuls of rum; after drinking which, and having wrung our clothes and taken our breakfast of bread and water, we became a little refreshed.

“On the evening of the 24th, the wind moderated, and the weather looked much better, which rejoiced all hands, so that they ate their scanty allowance with more satisfaction than for some time past. The night also was fair; but being always wet with the sea, we suffered much from the cold. I had the pleasure to see a fine morning produce some cheerful countenances; and for the first time during the last fifteen days, we experienced comfort from the warmth of the sun. We stripped and hung up our clothes to dry, which were by this time become so threadbare, that they could not keep out either wet or cold. In the afternoon we had many

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birds about us, which ~~are~~ never seen far from land, such as boobies and noddies." . . .

On the 25th, about noon, some noddies came so near to the boat, that one of them was caught by hand. This bird was about the size of a small pigeon. "I divided it," says Bligh, "with its entrails, into eighteen portions, and by a well-known method at sea, of '*Who shall have this?*' it was distributed with the allowance of bread and water for dinner, and eaten up, bones and all, with salt water for sauce. In the evening, several boobies flying very near to us, we had the good fortune to catch one of them. The bird is as large as a duck. They are the most presumptive proof of being near land of any sea-fowl we are acquainted with. I directed the bird to be killed for supper, and the blood to be given to three of the people who were the most distressed for want of food. The body, with the entrails, beak, and feet, I divided into eighteen shares, and with the allowance of bread, which I made a merit of granting, we made a good supper compared with our usual fare.

"On the next day, the 26th, we caught another booby, to that Providence appeared to be relieving our wants in an extraordinary manner. The people were overjoyed at this addition to their dinner, which was distributed in the same manner as on the preceding evening; giving the blood to those who were the most in want of food. To make the bread a little savoury, most of the men frequently dipped it in salt water; but I generally broke mine into small pieces, and ate it in my allowance of water, out of a cocoa-nut shell, with a spoon, economically avoiding to take too large a piece at a time; so that I was as long at dinner as if it had been a much more plentiful meal." . . .

In the morning of the 28th, the helmsman heard

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the sound of breakers. It^hwas the "barrier reef" which runs along the eastern coast of New Holland, through which they hoped to discover a passage. Mr. Bligh says this was now become absolutely necessary, without a moment's loss of time. The idea of getting into smooth water and finding refreshments kept up the people's spirits. The sea broke furiously over the reef in every part; within, the water was so smooth and calm, that every man already anticipated the heartfelt satisfaction he was about to receive, as soon as he should have passed the barrier. - At length a break in the reef was discovered, a quarter of a mile in width; and through this the boat rapidly passed with a strong stream running to the westward, and came immediately into smooth water, and all the past hardships seemed at once to be forgotten. . . .

The coast now began to show itself very distinctly, and in the evening they landed on the sandy point of an island, when it was soon discovered there were oysters on the rocks, it being low water. The party sent out to reconnoitre returned highly rejoiced at having found plenty of oysters and fresh water. By the help of a small magnifying glass, a fire was made. . . .

"This day (29th May) being," says Lieutenant Bligh, "the anniversary of the restoration of King Charles II., and the name not being inapplicable to our present situation (for we were *restored* to fresh life and strength), I named this 'Restoration Island;' for I thought it probable that Captain Cook might not have taken notice of it."

With oysters and palm-tops stewed together the people now made excellent meals, without consuming any of their bread. In the morning of the 30th, Mr. Bligh saw with great delight a visible alteration in the men for the better, and he sent them away to gather oysters, in order to carry a stock of them

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to sea; for he determined to put off again that evening. They also procured fresh water, and filled all their vessels to the amount of nearly sixty gallons. On examining the bread, it was found there still remained about thirty-eight days' allowance.

Being now ready for sea, every person was ordered to attend prayers; but just as they were embarking, about twenty naked savages made their appearance, running and hallooing, and beckoning the strangers to come to them; but, as each was armed with a spear or lance, it was thought prudent to hold no communication with them. They now proceeded to the northward, having the continent on their left, and several islands and reefs on their right.

On the 31st they landed on one of the islands, to which was given the name of "Sunday." "I sent out two parties," says Bligh, "one to the northward and the other to the southward, to seek for supplies, and others I ordered to stay by the boat. On this occasion fatigue and weakness so far got the better of their sense of duty, that some of the people expressed their discontent at having worked harder than their companions, and declared that they would rather be without their dinner than go in search of it. One person, in particular, went so far as to tell me, with a mutinous look, that he was as good a man as myself. It was not possible for one to judge where this might have an end, if not stopped in time; to prevent, therefore, such disputes in future, I determined either to preserve my command or die in the attempt; and seizing a cutlass, I ordered him to lay hold of another and defend himself; on which he called out, that I was going to kill him, and immediately made concessions. I did not allow this to interfere further with the harmony of the boat's crew, and everything soon became quiet." . . .

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On the 3rd of June, after^{ly} passing several islands, and doubling Cape York, the north-easternmost point of New Holland, the little boat and her brave crew once more launched into the open ocean. "Miserable," says Lieutenant Bligh, "as our situation was in every respect, I was secretly surprised to see that it did not appear to affect any one so strongly as myself; on the contrary, it seemed as if they had embarked on a voyage to Timor in a vessel sufficiently calculated for safety and convenience. So much confidence gave me great pleasure, and I may venture to assert that to this cause our preservation is chiefly to be attributed. I encouraged every one with hopes that eight or ten days would bring us to a land of safety; and after praying to God for a continuance of his most gracious protection, I served out an allowance of water for supper, and directed our course to the west-south-west.

"We had been just six days on the coast of New Holland, in the course of which we found oysters, a few clams, some birds, and water. But a benefit, probably not less than this, was that of being relieved from the fatigue of sitting constantly in the boat, and enjoying good rest at night. These advantages certainly preserved our lives; and, small as the supply was, I am very sensible how much it alleviated our distresses. Before this time nature must have sunk under the extremes of hunger and fatigue. Even in our present situation, we were most deplorable objects; but the hopes of a speedy relief kept up our spirits. For my own part, incredible as it may appear, I felt neither extreme hunger nor thirst. My allowance contented me, knowing that I could have no more." . . .

"In the morning of the 10th, after a very comfortless night, there was a visible alteration for the worse," says Mr. Bligh, "in many of the people, which gave

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me great apprehensions. An extreme weakness, swelled legs, hollow and ghastly countenances, a more than common inclination to sleep, with an apparent debility of understanding, seemed to me the melancholy presages of an approaching dissolution. The surgeon and Lebogue, in particular, were most miserable objects; I occasionally gave them a few tea-spoonfuls of wine, out of the little that remained, which greatly assisted them. The hope of being able to accomplish the voyage was our principal support. The boatswain very innocently told me, that he really thought I looked worse than any in the boat. The simplicity with which he uttered such an opinion amused me, and I returned him a better compliment."

At three in the morning of the following day, Timor was discovered at the distance only of two leagues from the shore.

"It is not possible for me," says Bligh, "to describe the pleasure which the blessing of the sight of this land diffused among us. It appeared scarcely credible to ourselves that, in an open boat, and so poorly provided, we should have been able to reach the coast of Timor in forty-one days, after leaving Tofoa, having in that time run, by our log, a distance of three thousand six hundred and eighteen nautical miles; and that, notwithstanding our extreme distress, no one should have perished in the voyage."

On Sunday the 14th they came safely to anchor in Coupang Bay, where they were received with every mark of kindness, hospitality, and humanity. The houses of the principal people were thrown open for their reception. The poor sufferers when landed were scarcely able to walk; their condition is described as most deplorable. "The abilities of a painter could rarely, perhaps, have been displayed to more advantage than in the delineation of the

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two groups of figures which at this time presented themselves to each other. An indifferent spectator (if such could be found) would have been at a loss which most to admire, the eyes of famine sparkling at immediate relief, or the horror of their preservers at the sight of so many spectres, whose ghastly countenances, if the cause had been unknown, would rather have excited terror than pity. Our bodies were nothing but skin and bones, our limbs were full of sores, and we were clothed in rags: in this condition, with the tears of joy and gratitude flowing down our cheeks, the people of Timor beheld us with a mixture of horror, surprise, and pity.

“When,” continues the commander, “I reflect how providentially our lives were saved at Tofoa, by the Indians delaying their attack; and that, with scarcely anything to support life, we crossed a sea of more than twelve hundred leagues, without shelter from the inclemency of the weather: when I reflect that, in an open boat, with so much stormy weather, we escaped foundering, that not any of us were taken off by disease, that we had the great good fortune to pass the unfriendly natives of other countries without accident, and at last to meet with the most friendly and best of people to relieve our distresses,—I say, when I reflect on all these wonderful escapes, the remembrance of such great mercies enables me to bear with resignation and cheerfulness the failure of an expedition the success of which I had so much at heart, and which was frustrated at a time when I was congratulating myself on the fairest prospect of being able to complete it in a manner that would fully have answered the intention of his Majesty, and the humane promoters of so benevolent a plan.”

BLIGH's *Journal* (ed. J. Barrow), *The Mutiny of
H.M.S. Bounty*

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[The following letter from the captain of H.M.S. *Briton*, cruising in the Pacific, explains what happened to the crew who cast Bligh and his men adrift.]

“ *Briton*, Valparaíso, 18th Oct., 1814.

“ I have the honour to inform you that on my passage from the Marquesas Islands to this port on the morning of the 17th September, I fell in with an island where none is laid down in the Admiralty or other charts, according to the several chronometers of the *Briton* and *Tagus*. I therefore hove to, until daylight, and then closed to ascertain whether it was inhabited, which I soon discovered it to be, and, to my great astonishment, found that every individual on the island (forty in number) spoke very good English. They proved to be the descendants of the deluded crew of the *Bounty*, who, from Otaheite, proceeded to the above-mentioned island, where the ship was burnt.

“ Christian appeared to have been the leader and sole cause of the mutiny in that ship. A venerable old man, named John Adams, is the only surviving Englishman of those who last quitted Otaheite in her, and whose exemplary conduct, and fatherly care of the whole of the little colony, could not but command admiration. The pious manner in which all those born on the island have been reared, the correct sense of religion which has been instilled into their young minds by this old man, has given him the pre-eminence over the whole of them, to whom they look up as the father of one and the whole family.

“ A son of Christian was the first-born on the island, now about twenty-five years of age, named Thursday October Christian: the elder Christian fell a sacrifice to the jealousy of an Otaheitan man, within three or four years after their arrival on the

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island. The mutineers were accompanied thither by six Otaheitan men and twelve women; the former were all swept away by desperate contentions between them and the Englishmen, and five of the latter died at different periods, leaving at present only one man (Adams) and seven women of the original settlers.

"The island must undoubtedly be that called Pitcairn, although erroneously laid down in the charts. We had the altitude of the Meridian sun close to it, which gave us $25^{\circ} 4' S.$ latitude, and $130^{\circ} 25' W.$ longitude, by the chronometers of the *Briton* and *Tagis*.

"It produces in abundance yams, plantains, hogs, goats, and fowls; but the coast affords no shelter for a ship or vessel of any description; neither could a ship water there without great difficulty.

"I cannot, however, refrain from offering my opinion, that it is well worthy the attention of our laudable religious societies, particularly that for propagating the Christian religion, the whole of the inhabitants speaking the Otaheitan tongue as well as the English.

"During the whole of the time they have been on the island, only one ship has ever communicated with them, which took place about six years since; and this was the American ship *Topaz*, of Boston, Mayhew Folger, master.

"The island is completely iron-bound with rocky shores, and the landing in boats must be at all times difficult, although the island may be safely approached within a short distance by a ship.

(Signed) "T. STAINES."

SCOTT REACHES THE SOUTH POLE

[CAPTAIN SCOTT made two expeditions to the Antarctic. In 1901 King Edward VIIth Land was discovered and the *Discovery*, specially built to cope with ice conditions, was frozen in for two years. Huts were built on the ice and excursions by sledge took Scott, Shackleton, and Wilson nearly 400 miles further south. They suffered terrible privations on the return journey and only just succeeded in reaching their final camp. Perhaps their most important discovery was the existence of a great mountain plateau, rising to nearly 10,000 feet, on which the South Pole is situated.

Scott's second expedition left England in June, 1910, in the *Terra Nova*, which was especially fitted for scientific purposes and carried a brilliant group of geologists and physicists. Many of the sledges, dogs, ponies, tents, etc., were the gift of various schools in England and bore their familiar names. In the Antarctic Ocean the ship was hemmed in and had to force her way through 370 miles of pack-ice. On November 1, 1911, Scott started on his last great journey. A blizzard held the party up and progress was further slowed by the deep soft snows. On December 14th, the very day Amundsen reached the South Pole, Scott wrote in his diary that the outlook was not hopeful. Five explorers headed by Scott started on the last 140 miles of the journey and reached the Pole only to find that the Norwegian party had forestalled them by a month.

The tragedy of the return journey and the pathos of the last hours are well known.

The extracts which follow are all taken from Scott's personal *Journal*. They describe those anxious days when the ship could find no way

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through the ice, tell of Scott's interest in penguins and killer-whales, and his terrible disappointment when he found Amundsen's flag marking the South Pole.]

"I can imagine few things more trying to the patience than the long wasted days of waiting. Exasperating as it is to see the tons of coal melting away with the smallest mileage to our credit, one has at least the satisfaction of active fighting and the hope of better fortune. To wait idly is the worst of conditions. You can imagine how often and how restlessly we climbed to the crow's nest and studied the outlook. And strangely enough there was generally some change to note. A water lead would mysteriously open up a few miles away or the place where it had been would as mysteriously close. Huge icebergs crept silently towards or past us, and continually we were observing these formidable objects with range-finder and compass to determine the relative movement, sometimes with misgiving as to our ability to clear them. Under steam the change of conditions was even more marked. Sometimes we would enter a lead of open water and proceed for a mile or two without hindrance; sometimes we would come to big sheets of thin ice which broke easily as our iron-shod prow struck them, and sometimes even a thin sheet would resist all our attempts to break it; sometimes we would push big floes with comparative ease and sometimes a small floe would bar our passage with such obstinacy that one would almost believe it possessed of an evil spirit; sometimes we passed through acres of sludgy sodden ice which hissed as it swept along the side, and sometimes the hissing ceased seemingly without rhyme or reason, and we found our screw churning the sea without any effect.

"Thus the steaming days passed away in an ever-

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changing environment and are remembered as an unceasing struggle.

“Meares and the dogs were out early, and have been running to and fro most of the day with light loads. The great trouble with them has been due to the fatuous conduct of the penguins. Groups of these have been constantly leaping on to our floc. From the moment of landing on their feet their whole attitude expressed devouring curiosity and a pig-headed disregard for their own safety. They waddle forward, poking their heads to and fro in their usually absurd way, in spite of a string of howling dogs straining to get at them. ‘Hulloa!’ they seem to say, ‘here’s a game—what do all you ridiculous things want?’ And they come a few steps nearer. The dogs make a rush as far as their leashes or harness allow. The penguins are not daunted in the least, but their ruffs go up and they squawk with semblance of anger, for all the world as though they were rebuking a rude stranger—their attitude might be imagined to convey ‘Oh, that’s the sort of animal you are; well, you’ve come to the wrong place—we aren’t going to be bluffed and bounced by you,’ and then the final fatal steps forward are taken and they come within reach. There is a spring, a squawk, a horrid red patch on the snow, and the incident is closed. Nothing can stop these silly birds. Members of our party rush to head them off, only to be met with evasions—the penguins squawk and duck as much as to say, ‘What’s it got to do with you, you silly ass? Let us alone.’

“*Thursday, January 5.*—All hands were up at 5 this morning and at work at 6. Words cannot express

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the splendid way in which every one works and gradually the work gets organised. I was a little late this morning, and thereby witnessed a most extraordinary scene. Some 6 or 7 killer whales, old and young, were skirting the fast floe edge ahead of the ship; they seemed excited and dived rapidly, almost touching the floe. As we watched, they suddenly appeared astern, raising their snouts out of water. I had heard weird stories of these beasts, but had never associated serious danger with them. Close to the water's edge lay the wire stern rope of the ship, and our two Esquimaux dogs were tethered to this. I did not think of connecting the movements of the whales with this fact, and seeing them so close I shouted to Ponting, who was standing abreast of the ship. He seized his camera and ran towards the floe edge to get a close picture of the beasts, which had momentarily disappeared. The next moment the whole floe under him and the dogs heaved up and split into fragments. One could hear the 'booming' noise as the whales rose under the ice and struck it with their backs. Whale after whale rose under the ice, setting it rocking fiercely; luckily Ponting kept his feet and was able to fly to security. By an extraordinary chance also, the splits had been made around and between the dogs, so that neither of them fell into the water. Then it was clear that the whales shared our astonishment, for one after another their huge hideous heads shot vertically into the air through the cracks which they had made. As they reared them to a height of 6 or 8 feet it was possible to see their tawny head markings, their small glistening eyes, and their terrible array of teeth—by far the largest and most terrifying in the world. There cannot be a doubt that they looked up to see what had happened to Ponting and the dogs.

"The latter were horribly frightened and strained

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to their chains, whining; the head of one killer must certainly have been within 5 feet of one of the dogs.

“*Night, January 15.*—It is wonderful to think that two long marches would land us at the Pole. We left our depôt to-day with nine days’ provisions, so that it ought to be a certain thing now, and the only appalling possibility the sight of the Norwegian flag forestalling ours. Little Bowers continues his indefatigable efforts to get good sights, and it is wonderful how he works them up in his sleeping-bag in our congested tent. (Minimum for night – $27^{\circ}5'$.) Only 27 miles from the Pole. We *ought* to do it now.

“*Tuesday, January 16.*—Camp 68. Height 9,760. T. – $23^{\circ}5'$. The worst has happened, or nearly the worst. We marched well in the morning and covered $7\frac{1}{2}$ miles. Noon sight showed us in Lat. $89^{\circ}42'$ S., and we started off in high spirits in the afternoon, feeling that to-morrow would see us at our destination. About the second hour of the march Bowers’ sharp eyes detected what he thought was a cairn; he was uneasy about it, but argued that it must be a sastrugus. Half an hour later he detected a black speck ahead. Soon we knew that this could not be a natural snow feature. We marched on, found that it was a black flag tied to a sledge bearer; near by the remains of a camp; sledge tracks and ski tracks going and coming and the clear trace of dogs’ paws—many dogs. This told us the whole story. The Norwegians have forestalled us and are first at the Pole. It is a terrible disappointment, and I am very sorry for my loyal companions. Many thoughts come and much discussion have we had. To-morrow we must march on to the Pole and then hasten home with all the speed we can compass. All the day-dreams must go; it will be a wearisome return. We

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are descending in altitude—certainly also the Norwegians found an easy way up.

“*Wednesday, January 17.*—Camp 69. T. -22° at start. Night -21° . The Pole. Yes, but under very different circumstances from those expected. We have had a horrible day—add to our disappointment a head wind 4 to 5, with a temperature -22° , and companions labouring on with cold feet and hands.

“We started at 7.30, none of us having slept much after the shock of our discovery. We followed the Norwegian sledge tracks for some way; as far as we make out there are only two men. In about three miles we passed two small cairns. Then the weather overcast, and the tracks being increasingly drifted up and obviously going too far to the west, we decided to make straight for the Pole according to our calculations. At 12.30 Evans had such cold hands we camped for lunch—an excellent ‘week-end’ one. We had marched 7.4 miles. We started out and did $6\frac{1}{2}$ miles due south. To-night little Bowers is laying himself out to get sights in terrible difficult circumstances; the wind is blowing hard, T. -21° , and there is that curious damp, cold feeling in the air which chills one to the bone in no time. We have been descending again, I think, but there looks to be a rise ahead; otherwise there is very little that is different from the awful monotony of past days. Great God! this is an awful place and terrible enough for us to have laboured to it without the reward of priority. Well, it is something to have got here, and the wind may be our friend to-morrow. We have had a fat Polar hoosh in spite of our chagrin, and feel comfortable inside—added a small stick of chocolate and the queer taste of a cigarette brought by Wilson. Now for the run home and a desperate struggle. I wonder if we can do it.

“*Thursday morning, January 18.*—Decided after sum-

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ming up all observations that we were 3·5 miles away from the Pole—one mile beyond it and 3 to the right. More or less in this direction Bowers saw a cairn or tent.

“We have just arrived at this tent, 2 miles from our camp, therefore about $1\frac{1}{2}$ miles from the Pole. In the tent we find a record of five Norwegians having been here, as follows :

Roald Amundsen

Olav Olavson Bjaaland

Hilner Hanssen

Sverre H. Hassel

Oscar Wisting. 16 Dec. 1911.

“The tent is fine—a small compact affair supported by a single bamboo. A note from Amundsen, which I keep, asks me to forward a letter to King Haakon !

“The following articles have been left in the tent : 3 half bags of reindeer containing a miscellaneous assortment of mits and sleeping socks, very various in description, a sextant, a Norwegian artificial horizon and a hypsometer without boiling-point thermometers, a sextant and hypsometer of English make.

“Left a note to say I had visited the tent with companions. Bowers photographing and Wilson sketching. . . . We built a cairn, put up our poor slighted Union Jack, and photographed ourselves—mighty cold work all of it—less than $\frac{1}{2}$ a mile south we saw stuck up an old underrunner of a sledge. This we commandeered as a yard for a floorcloth sail. . . .

“We carried the Union Jack about $\frac{3}{4}$ of a mile north with us and left it on a piece of stick as near as we could fix 'it. I fancy the Norwegians arrived at the Pole on the 15th Dec and left on the 17th, ahead of a date quoted by me in London as ideal, viz. Dec. 22. It looks as though the Norwegian party

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expected colder weather on the summit than they got; it could scarcely be otherwise from Shackleton's account. Well, we have turned our back now on the goal of our ambition and must face our 800 miles of solid dragging—and good-bye to most of the day-dreams!"

CAPTAIN SCOTT, *Journal*

SOUTH

[SIR ERNEST SHACKLETON (1874-1922) died whilst on a scientific voyage to the Antarctic. In an expedition in 1907 he had reached within 100 miles of the South Pole and in 1914 he decided to attempt a journey across the entire Antarctic—about 1800 miles. In the Preface to his book *South* Shackleton says, "After the conquest of the South Pole by Amundsen, who, by a narrow margin of days, was in advance of the British expedition under Scott, only one great main object of Antarctic journeyings remained—the crossing of the South Polar continent from sea to sea. We failed in this great object but . . . there are chapters in this book of high adventure, unique experiences, and, above all, records of unflinching determination, supreme loyalty, and generous self-sacrifice on the part of my men, which will appeal urgently to every one who is interested in the tale of the White Warfare of the South."

After reaching unexplored land in January 1915, the *Endurance* was caught in the ice and imprisoned for eight months. By August the ice pressure was tremendous and "The floes, with the force of millions of tons of moving ice behind them, were simply annihilating the ship."]

The south-westerly breeze freshened to a gale on the 14th, and the temperature fell from +31° Fahr.

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to -1° Fahr. The wind died down during the day and the pack opened for five or six miles to the north. Our efforts, however, to force the ship out of the lead failed, and heavy pressure developed late on Sunday, the 17th. The two floes between which the ship was lying began to close, and the *Endurance* was subjected to a series of tremendously heavy strains. In the engine-room, the 'weakest point', loud groans, crashes and hammering sounds were heard. For nearly an hour the ship valiantly stood the strain, and then, to my great relief, she began to rise with heavy jerks and jars. The ice was getting below us and the immediate danger was past. Our position was lat. $69^{\circ} 19' S.$, long. $50^{\circ} 40' W.$

The next attack of the ice came during the afternoon of October 19th. The two floes began to move laterally and exerted great pressure on the ship. Suddenly the floe on the port side cracked and huge pieces of ice shot up from under the port bilge. Within a few seconds the ship heeled over until she had a list of 30 degrees to port, being held under the starboard bilge by the opposing floe. Everything movable on deck and below fell to the lee side, and for a few minutes it looked as if the ship would be thrown upon her beam ends. The midship dog-kennels broke away and crashed down on to the lee kennels, and the howls and barks of the frightened dogs helped to create a perfect pandemonium. Order, however, was soon restored.

If the ship had heeled any farther it would have been necessary to release the lee boats and pull them clear, and Worsley was watching to give the alarm. Dinner in the wardroom that evening was a curious affair, for most of the diners had to sit on the deck, their feet against battens and their plates on their knees. At 8 P.M. the floes opened, and within a few minutes the *Endurance* was again nearly upright.

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Although the ship was still securely imprisoned in the pool, it was obvious that our chance might come at any moment, and watches were set so as to be ready for working ship. At 11 A.M. on October 20th we gave the engines a gentle trial astern. Everything worked well after eight months of frozen inactivity, except that the bilge-pump and the discharge proved to be frozen up; with some little difficulty they were cleared.

The next two days brought low temperatures with them, and the open leads again froze over. The pack was working, and the roar of pressure ever and anon was heard. We waited for the next move of the gigantic forces arrayed against us, and on Sunday, October 24th, the beginning of the end for the *Endurance* came. The position was lat. $69^{\circ} 11'$ S., long. $51^{\circ} 5'$ W.

We now had twenty-two and a half hours of daylight, and throughout the day we watched the threatening advance of the floes. At 6.45 P.M. the ship sustained heavy pressure in a dangerous position. The onslaught was almost irresistible. The ship groaned and quivered as her starboard quarter was forced against the floe, twisting the stern-post and starting the heads and ends of planking. The ice had lateral as well as forward movement, and the ship was twisted and actually bent by the stresses. She began to leak dangerously at once.

I had the pumps rigged, got up steam, and started the bilge pumps by 8 P.M. By that time the pressure had relaxed. The ship was making water rapidly aft, and all hands worked, watch and watch, during the night, pumping ship and helping the carpenter. By morning the leak was being kept in check.

On Monday, October 25th, the leak was kept under fairly easily, but the outlook was bad. Heavy pressure-ridges were forming in all directions, and I

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realised that our respite from pressure could not be prolonged. The pressure-ridges, massive and menacing, testified to the overwhelming nature of the forces at work. Huge blocks of ice, weighing many tons, were lifted into the air and tossed aside as other masses rose beneath them.

I scarcely dared to hope any longer that the *Endurance* would live, and during that anxious day I reviewed all my plans for the sledging journey which we should have to make if we had to take to the ice. As far as forethought could make us, we were ready for any contingency. Stores, dogs, sledges and equipment were ready to be moved from the ship at a moment's notice.

The following day was bright and clear, and the sunshine was inspiring. But the roar of pressure continued, new ridges were rising, and as the day wore on I could see the lines of major disturbance were drawing nearer to the ship. The day passed slowly. At 7 P.M. very heavy pressure developed, with twisting strains which racked the ship fore and aft. The butts of planking were opened 4 or 5 inches on the starboard side, and at the same time we could see the ship bending like a bow under titanic pressure. Almost like a living creature she resisted the forces which would crush her; but it was a one-sided battle. Millions of tons of ice pressed inexorably upon the gallant little ship which had dared the challenge of the Antarctic. She was now leaking badly, and at 9 P.M. I gave the order to lower boats, gear, provisions and sledges to the floe, and move them to the flat ice a little way from the ship.

Then came a fateful day—Wednesday, October 27th. The position was lat. $69^{\circ} 5' S.$, long. $51^{\circ} 30' W.$ The temperature was -8.5° Fahr., a gentle southerly breeze was blowing and the sun shone in a clear sky.

"After long months of ceaseless anxiety and strain,"

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I wrote, "after times when hope beat high and times when the outlook was black indeed, the end of the *Endurance* has come. But though we have been compelled to abandon the ship, which is crushed beyond all hope of ever being righted, we are alive and well, and we have stores and equipment for the task that lies before us. The task is to reach land with all the members of the Expedition. It is hard to write what I feel. To a sailor his ship is more than a floating home, and in the *Endurance* I had centred ambitions, hopes and desires. And now she is slowly giving up her sentient life at the very outset of her career. . . . The distance from the point where she became beset to the place where she now rests mortally hurt in the grip of the floes is 573 miles, but the total drift through all observed positions has been 1,186 miles, and we probably covered more than 1,500 miles.

"We are now 346 miles from Paulet Island, the nearest point where there is any possibility of finding food and shelter. A small hut built there by the Swedish Expedition in 1902 is filled with stores left by the Argentine relief ship. . . . The distance to the nearest barrier west of us is about 180 miles, but a party going there would still be about 360 miles from Paulet Island, and there would be no means of sustaining life on the barrier. We could not take food enough from here for the whole journey; the weight would be too great. . . ."

"The attack of the ice reached its climax at 4 P.M. The ship was hove stern up by the pressure, and the driving floe, moving laterally across the stern, split the rudder and tore out the rudder-post and stern-post. Then, while we watched, the ice loosened and the *Endurance* sank a little. The decks were breaking upwards and the water was pouring in below. Again the pressure began, and at 5 P.M. I ordered all hands on to the ice.

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“At last the twisting, grinding floes were working their will on the ship. It was a sickening sensation to feel the decks breaking up under one's feet, the great beams bending and then snapping with a noise like heavy gun-fire. The water was overmastering the pumps, and to avoid an explosion when it reached the boilers I ordered the fires to be drawn and the steam let down. The plans for abandoning the ship in case of emergency had been well made, and men and dogs made their way to an unbroken portion of the floe without a hitch.

“Just before leaving I looked down the engine-room skylight as I stood on the quivering deck, and saw the engines dropping sideways as the stays and bed-plates gave way. I cannot describe the impression of relentless destruction which was forced upon me as I looked down and around. The floes, with the force of millions of tons of moving ice behind them, were simply annihilating the ship.”

Essential supplies had been placed on the floe about 100 yards from the ship, but after we had begun to pitch our camp there the ice started to split and smash beneath our feet. Then I had the camp moved to a bigger floe, and boats, stores and camp equipment had to be conveyed across a working pressure-ridge. A pioneer party, with picks and shovels, had to build a snow-causeway before we could get all our possessions across. By 8 P.M. the camp had been pitched again. . . .

After the tents had been pitched I mustered all hands and explained the position as briefly and clearly as I could. I told them the distance to the Barrier and the distance to Paulet Island, and stated that I proposed to try to march with equipment across the ice in the direction of Paulet Island. I thanked the men for the steadiness they had shown under trying circumstances, and told them I did not doubt that

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we should all eventually reach safety provided that they continued to work their utmost and to trust me. Then we had supper, and all hands except the watch turned in.

But, for myself, I could not sleep, and the thoughts which came to me as I walked up and down in the darkness were not particularly cheerful. At midnight I was pacing the ice, listening to the grinding fl e and the groans and crashes that told of the death-agony of the *Endurance*, when I noticed suddenly a crack running across our floe right through the camp. The alarm-whistle brought all hands tumbling out, and we moved everything from what was now the smaller portion of the floe to the larger portion. Nothing more could be done then, and the men turned in again; but there was little sleep.

Morning came in chill and cheerless, and all hands were stiff and weary after their first disturbed night on the floe. Just at daybreak I went over to the *Endurance* with Wild and Hurley to retrieve some tins of petrol, which could be used to boil up milk for the rest of the men. The ship presented a painful spectacle of chaos and wreck, but with some difficulty we secured two tins of petrol, and postponed the further examination of the ship until after breakfast, when I went over to the *Endurance* again and examined the wreck more fully. •

Only six of the cabins had not been pierced by floes and blocks of ice. All the starboard cabins had been crushed, and the whole of the aft part of the ship had been crushed concertina fashion. The fore-castle and "The Ritz" were submerged, and the wardroom was three-quarters full of ice. The motor-engine forward had been driven through the galley. In short, scenes of devastation met me on every side. The ship was being crushed remorselessly.

Under a dull, overcast sky I returned to the camp,

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and, having examined the situation, I thought it wise to move to a larger and apparently stronger floe about 200 yards away. This camp became known as Dump Camp, owing to the amount of stuff that was thrown away there. I decided to issue a complete new set of Burberrys and underclothing to each man, and also a supply of socks. The camp was quickly transferred to the new floe, and there I began to direct the preparations for the long journey across the floes to Paulet Island or Snow Hill.

Meanwhile Hurley had rigged his cinematograph camera, and was getting pictures of the *Endurance* in her death-throes. While he was thus engaged, the foretop and top-gallant mast came down with a run and hung in wreckage on the fore-mast, with the foreyard vertical. The mainmast followed immediately, snapping off about 10 feet above the main deck. The crow's-nest fell within 10 feet of where Hurley was turning the handle of his camera, but he did not stop the machine and so secured a unique, though sad, picture.

The issue of clothing was quickly accomplished, but sleeping-bags were also required. We had eighteen fur bags, and so it was necessary to issue ten of the larger woollen bags in order to provide for the twenty-eight men of the party. As the fur bags were warmer, it seemed fair to distribute them by lot, but some of us older hands did not join in the lottery. Each man who received a woollen bag was also allowed a reindeer-skin to lie upon.

Having apportioned the clothing we turned one of the boats on its side, and supported it with two broken oars to make a lee for the galley. The cook got the blubber-stove going, and presently I heard one man say, "Cook, I like my tea strong." Another joined in, "Cook, I like mine weak." It was good to know that their minds were untroubled, but I

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thought the time opportune to mention that the tea would be the same for all hands, and that we should be fortunate if two months later we had any tea at all.

During the afternoon the work continued, and the arrangement of the tents and their internal management completed. Each tent had a mess-orderly, the duty being undertaken in alphabetical order.

A quiet night followed, for, although the pressure was grinding around us, our floe was heavy enough to withstand the blows it received. "We are," I wrote on October 29th, "twenty-eight men with forty-nine dogs. All hands this morning were busy preparing gear, fitting boats on sledges, and building and strengthening the sledges to carry the boats. The main motor sledge, with a little fitting from the carpenter, carried our largest boat admirably. The ship was still afloat, with the spurs of the pack driven through her and holding her up. The fore-castle-head is under water, the decks are burst up by the pressure, the wreckage lies around in dismal confusion, but over all the blue ensign still flies. . . .

"The number of dog teams has been increased to seven, Greenstreet taking charge of the additional team. . . . We have ten working sledges to relay with five teams. Wild's and Hurley's teams will haul the cutter with the assistance of four men. The whaler and the other boats will follow, and the men who are hauling them will be able to help with the cutter at the rough places. We cannot hope to make rapid progress, but each mile counts. Crean this afternoon has a bad attack of snow-blindness."

The weather on the morning of October 30th was overcast and misty, with occasional falls of snow. Our sledging and boating rations were still intact, for we were living on extra food brought from the abandoned ship. These provisions would provide full rations for twenty-eight men for fifty-six days, but we

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could count on enough seal and penguin meat at least to double this time. We could even, if progress proved too difficult and too injurious to the boats—which we had to guard as our ultimate means of salvation—camp on the nearest heavy flœc, scour the neighbouring pack for penguins and seals, and await the outward drift of the pack to open and navigable water. But, although this latter plan would have avoided grave dangers, I felt sure that the right thing to do was to attempt a march. It would be, I considered, so much better for the men to feel that they were progressing—even if the progress was slow—towards land and safety, than simply to sit down and wait for the tardy north-westerly drift to take us from the cruel waste of ice.

SIR ERNEST SHACKLETON, *South*

NOTES :

Odysseus builds himself a Ship

P. 4, l. 20. *Dowels*: fastening pins of wood or iron.

The Phœnician Sailors

P. 13, l. 26. *The men of Arvad*: (modern Ruwād), the most northerly cities of Phœnicia and ranking next to Tyre for trade and general enterprise.

l. 36. *I garmak*: Probably in S.W. Armenia.

P. 14, l. 1. *Men of Dedan*: a north Arabian people who sent their native wares to the markets of Tyre.

l. 10. *Minnith and Pannag*: Both names are of doubtful origin and it is difficult to say where they were situated. They were evidently famous for wheat.

l. 15. *Cassia*: inferior kind of cinnamon.

Calamus: aromatic cane or bark.

Sailing Round Africa, 600 B.C.

P. 16, l. 5. *Erythraean Sea*: the Red Sea.

l. 36. *Cape Soloets*: Probably Cape Spartel, near Tangier, or perhaps Cape Cantin, near Mogador.

Alexander the Great in the Indian Ocean, 334 B.C.

P. 20, l. 34. *Krôkela*: Crotchet Bay or Garangre.

P. 21, l. 3. *Bibactè*: Chilney.

l. 18. *Stadia*: 16 to an English mile.

P. 22, l. 13. *They discharged their engines*: an interesting and unusual instance of ancient artillery being used on board a ship.

l. 31. *Mâlana*: Moran or Maran.

l. 37. 10,000 *stadia*: 625 miles.

P. 23, l. 17. *Fruментy*: wheat boiled in milk and seasoned with cinnamon, sugar, etc.

l. 34. *Kuidza*: Khudar, Guttar.

P. 24, l. 35. *Forty feet long*: They found one washed ashore which measured 70 feet in length.

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An Ambassador from Persia to India, 1442

P. 28, l. 34. *Parasang*: ancient Persian measure of length, about $3\frac{1}{4}$ miles.

l. 37. *Ghez*: an ancient measure of length, 18 to 22 inches.

Viking Explorers

P. 33, l. 29. *Olaf Tryggvason*: King of Norway; he sent Leif on a mission to Greenland to preach Christianity.

Marco Polo sails from China

P. 44, l. 18. *Chanba*: Annam.

l. 25. *Cubebs*: pepper.

l. 34. *Zaitun*: a Chinese seaport.

Manji: in Southern China.

P. 45, l. 12. *Lacoc*: Malay.

l. 19. *Brazil-wood*: sappan-wood, used for red and brown dyes.

l. 23. *Porcelain shells*: white shells from the sea, used as money in the province of Yün-nan.

P. 46, l. 18. *Java the Lesser*: Sumatra.

P. 47, l. 15. *Basman*: in Sumatra.

l. 28. *Unicorns*: rhinoceros.

P. 49, l. 35. *This wine*: from Gomuti palms.

P. 50, l. 20. *The island of which we have been speaking*: Sumatra.

l. 30. *Tree-flour*: sago.

P. 51, l. 29. *Angaman*: Andaman Islands.

P. 52, l. 4. *Pharaoh's nuts*: coconuts.

Apples of Paradise: kind of citron.

l. 20. *Seilan*: Ceylon.

P. 53, l. 3. *Sesame*: plant from which oil, similar to olive oil, is extracted and used for cooking and lighting.

l. 35. *Maabar*: the Coromandel coast.

Ibn Battuta: The Greatest Moslem Explorer

P. 55, l. 27. *Cambay*: At the head of the Gulf of Cambay, was then one of the principal seaports of India. Its decline was due to the silting up of the Gulf and it is now used only by small boats.

P. 56, l. 2. *Káwá*: a small town opposite Cambay.

l. 4. *Qandahár*: A short distance from Káwá. It was known to mediaeval seamen as Gandar.

l. 29. *Sandabúr*: The name by which Goa was known to the early Muslim traders. It changed its name to Goa

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- when captured by the first European travellers in the early sixteenth century.
- P. 59, l. 18. *Massúfa*: a North African tribe.
- l. 19. • *Calicut*: Described by Battuta as one of the great seaports of the world. When the Portuguese established their trading stations in the sixteenth century Calicut fell into decay.
- l. 25. *The Samari*: sea-king.
- P. 60, l. 16. *Arbalists*: cross-bows.
- .. 17. *Smaller ones*: Used for towing the junks in calm weather.
- l. 37. *Sunarkáwán*: an old capital of Bengal.
- P. 61, l. 1. *Barghnakár*: the Andaman or Nicobar Islands or, perhaps, part of the mainland of Arakan in Burma.
- l. 5. *Areca*: kind of palm.
- l. 6. *Betel*: leaf of a tree which Indians chew.
- P. 62, l. 3. *Jáva*: a name applied generally to the Malay Archipelago. Muslim religion was carried there by Arabian travellers in the thirteenth century.
- l. 8. *Jack-tree*: East Indian fruit, like bread-fruit but coarser.
- Jamún*: a small fruit resembling an olive, but sweet.
- l. 20. *Motionless sea*: Probably the China Sea.
- The Discovery of Japan*
- P. 65, l. 2. *Tufaan*: typhoon.
- P. 66, l. 8. *The Lord be praised*: It was customary for the Portuguese at that time to praise God, both in fortune and misfortune.
- P. 67, l. 34. *A little rice*: This was a rice-growing district, notable for its vast and frequent floods.
- P. 69, l. 7. *Sophies*: shal.
- l. 11. *Fñes*: houses.
- P. 70, l. 7. *The working of silks*: The silk manufacture of Nanking later declined.
- l. 19. *Ducats*: worth between half a crown and three shillings.
- P. 71, l. 2. *By the kings*: Kublai Khan is reported to have made the Grand Canal up which Pinto was travelling.
- P. 73, l. 4. *The Lequios*: Luchu Islands.
- l. 13. *Rhumb*: line followed by ship sailing on one course.
- P. 76, l. 31. *Our country*: The Portuguese deliberately gave Asiatics a greatly exaggerated idea of the size and power of Portugal.
- P. 77, l. 13. *Vassal*: under the protection of.

SEA VOYAGES OF EXPLORATION

- P. 80, l. 1e. *King of Bungo*: The island of Kiu-chiu.
 l. 14. *Fuchoe*: Fukuoka.

Columbus discovers America

- P. 84, l. 22. *Rabo de Junco*: the water-wagtail.
 P. 86, l. 31. *Maravadiis*: Spanish coins, gold worth 14 shillings.
 P. 87, l. 18. *Boobies*: kind of gannet.

Magellan sails into the Pacific

- P. 105, l. 13. *A safe port*: Port St. Julian.
 l. 31. *That animal*: The guanaco, a species of llama.
 l. 37. *In the manner of shoes*: Hence arose the name "Patagonians" or "men with big feet," given by Magellan, because of the awkward appearance of the feet in such coverings, which were stuffed with straw for greater warmth.
 P. 107, l. 11. *Setebos*: that is, the big devil.
 P. 110, l. 3. *Sinallage*: various kinds of parsley plants.
 l. 29. *That sickness*: the scurvy.
 l. 30. *Verzin*: Brazil — the land of 'verzin' or brazil-wood.

Vasco da Gama sails to India by the Cape of Good Hope

- P. 113, l. 34. *São Brás*: This will be Mossel Bay.
 P. 114, l. 20. *By sea*: Probably a slip of the pen for "by land," which is sixty-four leagues.
 P. 115, l. 6. *Four or five flutes*: The gora is the musical instrument of the Hottentots, but it is not a flute or reed-pipe.
 l. 19. *Many seals*: The island is still known as Seal Island although there are no longer any seals. It is about half a mile from the land.
 l. 32. *Fotilicaios*: Cape penguins.
 l. 35. *A pillar*: The word used by the author is *padrão*; that is, a stone pillar bearing an inscription and the arms of Portugal.
 P. 116, l. 28. *Fifteen leagues*: The distances given are remarkably correct. From the Cape of Good Hope to Mossel Bay (*São Brás*) is sixty leagues, as stated. From there to Santa Cruz is fifty-six leagues and to the Rio do Infante is twenty-one more. Santa Cruz is the largest of a group of islands in the western part of Algoa Bay. The *Ilheus Chãos* are low rocky islets about seven leagues to the east.
 P. 117, l. 2. *The last discovery made by Bartolomeu Dias*: that

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is, the Rio do Infante, now known as the Great Fish River.

1. 13. *The currents*: The Agulhas current hereabouts runs at the rate of four knots an hour.

P. 118, l. 1. *Quartilho*: about three-fourths of a pint.

P. 119, l. 28. *Their language*: that is, Arabic.

P. 120, l. 37. *Marlotas*: short dresses of silk or wool worn in Persia and India.

P. 121, l. 10. *Mithkals*: about 4.4 grammes each.

1. 16. *Close to an island*: the island of S. Jorge.

1. 23. *Barcas*: (*Rarcos*, P. 122, l. 3). Boats of different size.

P. 122, l. 1. *Cords*: popularly known as coir rope.

1. 3. *Gepoese needles*: the mariner's compass.

1. 6. *A fruit as large as a melon*: the coconut.

P. 124, l. 35. *Abale*: in Arabic *wali*, governor.

Alcaide, in Portuguese, has the same meaning.

P. 125, l. 28. *A river close by*: the Elatur.

Raleigh's Search for El Dorado

P. 128, l. 19. *Waiche*: light-blue colour.

P. 130, l. 30. *Lagartos*: alligators.

P. 134, l. 27. *Maunderille*: *The Travels of Sir John Mandeville*—a collection of tales and legends of the 14th century.

Martin Frobisher and the Eskimos

P. 140, l. 21. *Both her courses*: mainsail and foresail.

1. 22. *Bonnets*: *carpases* faced to the foot of the courses.

P. 142, l. 6. *She sank down therewith*: "Which sight," writes Thomas Ellis, "so abashed the whole fleet, that we thought verily we should have tasted of the same sauce."

The Discovery of Canada

P. 158, l. 26. *Hochelaga*: Achelacy in old maps. Hakluyt writes Hochelay.

1. 28. *Some mountains*: The Laurentian Hills on the north and the Adirondacks on the south.

P. 159, l. 15. *The pestilence*: the scurvy.

P. 160, l. 9. *Most excellent remedy*: It seems to have been the hemlock. "A favourite beverage was made from the tips of hemlock boughs boiled in water and seasoned with maple sugar."

P. 161, l. 17. *A plant*: tobacco.

Amundsen finds the North West Passage

P. 167, l. 15. "*Mannik-tu-mi!*": Eskimo friendly greeting.

Talumiakto: an Eskimo employed by Amundsen.

SEA VOYAGES OF EXPLORATION

The Voyages of Quiros

- P. 175, l. 12. *San Marcos*: On modern maps "Merlav", or "Star Peak." Torres described it as a very high volcano.
- l. 35. "*Virgen Maria*": "*Gana*" in the Banks group.
- P. 177, l. 20. "*La Clementina*": Really several islands overlapping each other and looking like mainland.

3600 Miles in an Open Boat

- P. 204, l. 2. *Noddies*: tropical sea-birds.
- l. 8. "*Who shall have this?*": One person turns his back on the object that is to be divided; another then points separately to the portions, at each of them asking aloud, "*Who shall have this?*," to which the first answers by naming somebody. This method of distribution gives every man an equal choice of the best share. Bligh speaks of the great amusement caused when the black and claws fell to his share.

Scott reaches the South Pole

- P. 216, l. 22. *A sastrugus*: snow surface made irregular by the wind.
- P. 217, l. 7. *A held wind 4 to 5*: about 20 miles an hour.
- l. 32. *Polar hoosh*: thick soup.
- l. 33. *Wilson*: He was chief of the scientific staff.
- P. 218, l. 21. *A hypsometer*: an instrument for registering height.
- l. 30. *A floorcloth sail*: to help the sledge along.

THE END